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UNITED STATES DEPARTMENT OF AGRICULTURE

BULLETIN No. 389

Contribution from the Office of Public Roads and Rural Engineering
LOGAN WALLER PAGE, Director

Washington, D. C. May 10, 1917

PUBLIC ROAD MILEAGE AND REVENUES IN THE CENTRAL, MOUNTAIN, AND PACIFIC STATES, 1914

A COMPILATION SHOWING MILEAGE OF IMPROVED AND UNIMPROVED ROADS; SOURCES AND AMOUNTS OF ROAD REVENUES; BONDS ISSUED AND OUTSTANDING; AND A DESCRIPTION OF THE SYSTEMS OF ROAD ADMINISTRATION, FISCAL MANAGEMENT, AND OTHER FACTORS AFFECTING ROAD IMPROVEMENT IN EACH STATE

Prepared jointly by the
Division of Road Economics of the Office of Public Roads
and Rural Engineering, and State Collaborators

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A Compilation Showing Mileage of Improved and Unimproved Roads; Sources and Amounts of Road Revenues; Bonds Issued and Outstanding; a Description of the Systems of Road Administration, Fiscal Management, and Other Factors Affecting Road Improvement in Each State.

Prepared jointly by the Division of Road Economics of the Office of Public Roads and Rural Engineering, and State Collaborators.

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INTRODUCTORY.

In 1904 the policy of conducting an investigation at five-year intervals to ascertain the mileage of improved and unimproved roads, the revenues for road purposes, and other related data was adopted. A bulletin embodying data for the calendar year 1904 was published.[1] A similar investigation was conducted for the calendar year 1909 and the data issued as Bulletin No. 41. The investigation made for the calendar year 1914, which forms the basis for this bulletin, differed somewhat from the preceding investigations, as a greater number of State highway departments were in operation and more adequate facilities were possessed by them. Wherever it was practicable to do so, information was obtained directly by collaborators designated by the State highway departments and acting under specific instructions from this office.

In many instances it was impossible for the collaborators to obtain replies from all local officials, and accordingly letters and forms were sent directly from this office to such local officials. In the course of the investigation it was found necessary to enlist

[1] U. S. Dept. Agr., Office of Public Roads Bul. No. 32.

NOTE.—This bulletin will be of interest to officials engaged in the building and maintenance of roads.

the aid of local and State road associations, chambers of commerce, automobile clubs, postmasters, and private individuals in order to obtain adequate information. On account of the absence of detailed records in many of the towns and counties extreme accuracy is impossible. The data on mileage and revenues should therefore be considered as approximate only. Because of the large amount of correspondence necessary to conduct the investigation, considerable delay in the issuance of the data has been unavoidable.

Bulletins already have been issued for the Middle Atlantic States, the New England States, and the Southern States, respectively. These, together with this bulletin, which contains data for the Central, Mountain, and Pacific States, form a complete series embracing all of the 48 States. A convenient reference summary of all of the States also is issued coincident with this bulletin.

ROAD ADMINISTRATION IN THE CENTRAL, MOUNTAIN, AND PACIFIC STATES.

The greater part of all road and bridge work in the States comprised in this group is done under the supervision of county, township, or district authorities. There is, however, an increasing tendency toward State participation and management. Laws have been enacted creating or designating State highway departments or commissions in the States of California, Colorado, Idaho, Illinois, Iowa, Michigan, Minnesota, Missouri, Montana, New Mexico, North Dakota, Ohio, Oregon, South Dakota, Utah, Washington, and Wisconsin. Duties somewhat similar to those exercised by State highway departments or commissions are imposed upon the State engineer in the States of Kansas, Nebraska, Nevada, and Wyoming; and all the functions of a State highway department or commission are exercised by the State engineer and the State board of control in the State of Arizona. An outline of the system of road administration in force in each State is given under the respective State headings.

PUBLIC ROAD REVENUES.

The total revenue applied to roads and bridges in the Central, Mountain, and Pacific States in the year 1914 amounted to $131,446,647.62, including State appropriations, motor-vehicle registration and license fees, amounts derived from local taxation, and expenditures from bond issues, both State and local. In 1904 the total revenue applied to this purpose amounted to $36,794,586.67. The increase in 1914 as compared with 1904 was, therefore, $94,652,060.95, or 257.24 per cent. Table 1 presents in condensed form the information assembled concerning revenues for this group of States for the year 1914, with comparative information for the year 1904.

TABLE 1.—*Revenue applied to roads and bridges.*

State.	Total revenue applied to roads and bridges.		Increase in revenue over 1904.	
	1904	1914	Total increase.	Percentage of increase.
Arizona	$109,309.43	$982,721.22	$873,411.79	799
California	2,157,396.36	19,171,984.66	17,014,588.30	786.6
Colorado	707,223.63	1,937,546.23	1,230,322.60	173.96
Idaho	311,588.00	1,371,468.59	1,059,880.59	340
Illinois	4,210,950.32	8,734,712.77	4,523,762.45	107.42
Indiana	4,335,108.00	14,233,985.93	9,898,877.93	228.34
Iowa	3,106,607.50	10,187,507.32	7,080,899.82	227.92
Kansas	1,232,817.45	5,544,048.00	4,311,230.55	349.7
Michigan	3,179,787.88	9,261,998.00	6,082,210.12	191.27
Minnesota	1,961,629.24	6,458,940.07	4,497,310.83	229.26
Missouri	2,368,972.79	5,513,048.71	3,144,075.92	132.72
Montana	404,097.81	2,888,400.61	2,484,302.80	614.77
Nebraska	878,547.40	1,796,277.69	917,730.29	104.4

TABLE 1.—*Revenue applied to roads and bridges*—Continued.

State.	Total revenue applied to roads and bridges.		Increase in revenue over 1904.	
	1904	1914	Total increase.	Percentage of increase.
Nevada	$46,875.85	[1] $245,013.65	$198,137.80	422.68
New Mexico	165,651.56	556,398.82	390,747.26	235.88
North Dakota	550,340.72	2,402,383.52	1,852,042.80	436.52
Ohio	5,706,083.61	14,334,245.98	8,628,162.37	151.23
Oregon	796,375.97	5,310,466.76	4,514,090.79	566.84
South Dakota	383,283.07	1,217,809.42	834,526.35	217.73
Utah	218,675.78	803,070.63	584,394.85	267.24
Washington	1,436,070.19	7,944,717.38	6,508,647.19	453.22
Wisconsin	2,181,262.38	9,880,240.50	7,698,978.12	352.26
Wyoming	345,931.73	669,661.16	323,729.43	93.58
Total	36,794,586.67	131,446,647.62	94,652,060.95	257.24

[1] For 1915.

A comparison showing the average revenues for roads and bridges in the Central, Mountain, and Pacific States per mile of road, per square mile of area, per thousand of rural population, and per $100 of assessed valuation for the years 1904 and 1914 is presented in Table 2. This average does not indicate, however, the proportion of expenditures for construction and maintenance, respectively.

TABLE 2.—*Revenue according to mileage, area, population, and valuation.*

State.	Road revenues.							
	Per mile of road.		Per square mile of area.		Per capita.		Per $100 of assessed valuation.	
	1904	1914	1904	1914	1904[1]	1914[2]	1904[3]	1914[4]
Arizona	$18.25	$81.38	$0.96	$8.63	$0.89	$4.81	$0.27	$0.70
California	46.24	314.09	13.82	123.17	1.45	8.06	.17	.66
Colorado	23.40	48.70	6.82	18.69	1.31	2.42	.20	.46
Idaho	17.15	56.22	3.73	16.45	1.92	4.21	.51	.82
Illinois	44.73	91.32	75.19	155.85	.87	1.54	.41	.37
Indiana	63.46	194.06	120.80	394.89	1.72	5.27	.31	.75
Iowa	30.32	97.88	55.89	183.27	1.39	4.58	.54	1.13
Kansas	12.18	49.92	15.07	67.79	.83	3.28	.34	.20
Michigan	45.88	124.84	55.32	161.13	1.31	3.29	.22	.40
Minnesota	24.72	69.06	24.26	79.88	1.12	3.11	.26	.44
Missouri	21.90	57.40	34.47	80.22	.76	1.67	.19	.30
Montana	18.02	73.67	2.76	19.75	1.66	7.68	.22	.83
Nebraska	11.05	22.37	11.43	23.38	.82	1.51	.49	.39
Nevada	3.72	20.11	.42	2.23	1.10	2.99	.16	.24
New Mexico	10.80	46.86	1.35	4.54	.84	1.69	.43	.77
North Dakota	9.28	34.92	7.84	34.23	1.72	4.16	.41	.68
Ohio	82.17	165.99	140.06	351.84	1.37	3.00	.29	.22
Oregon	23.24	144.23	8.33	55.54	1.92	7.89	.54	.59
South Dakota	6.46	12.64	4.98	15.84	.95	2.08	.20	.34
Utah	30.84	91.15	2.66	9.77	.79	2.15	.18	.40
Washington	44.88	187.25	21.48	118.87	2.77	6.95	.55	.79
Wisconsin	34.30	130.50	39.47	178.81	1.05	4.23	.14	.40
Wyoming	9.45	45.25	3.54	6.86	1.04	4.59	.79	.37
Weighted average	30.94	96.74	19.03	67.98	1.21	3.58	.27	.44

[1] Based on the 1900 United States census.
[2] Based on the 1902 United States census.
[3] Based on the 1910 United States census.
[4] Based on the 1912 United States census.

ROAD AND BRIDGE BONDS.

The total State, county, township, and district road and bridge bonds outstanding on January 1, 1915, in the Central, Pacific, and Mountain States, amounted to $128,767,414.57. In 1914 the expenditures from bond issues amounted to $28,949,759.48; bonds were retired to the amount of $9,214,166.62; bonds voted $24,960,869.20; and bonds sold $25,611,229.42.

State bonds have been issued in California, Idaho, Utah, and Washington. In California the bond issue for the construction of a system of State highways amounted to $18,000,000. Some district road bonds have been issued in Kansas, but it was impossible to ascertain the amounts. No State, county, or township road and bridge bonds were reported for Nebraska, North Dakota, South Dakota, or Wyoming. All of the other States in this group, however, have outstanding local bonds.

Information in regard to bond issues is presented by States in Table 3, and detailed information, showing bond issues by counties, is given under the State headings.

TABLE 3.—*Road and bridge bonds.*

State.	Total outstanding Jan. 1, 1915.	Expended from bond issues during 1914.	Retired during 1914.	Voted during 1914.	Sold during 1914.
Arizona	$295,000.00	$8,780.59	(1)	$275,000.00	$275,000.00
California	[2] 32,277,000.00	8,886,192.56	$271,000.00	2,712,000.00	2,712,000.00
Colorado	90,500.00	1,234.50	(1)	(1)	(1)
Idaho	[3] 1,339,000.00	226,000.00	(1)	425,000.00	375,000.00
Illinois	798,761.55	208,855.41	161,914.34	3,656,500.00	199,350.00
Indiana	42,095,357.34	9,396,186.98	5,957,266.47	4,538,221.31	8,619,005.53
Iowa	1,960,780.00	(1)	(1)	376,828.00	376,828.00
Kansas	(1)	(1)	(1)	(1)	(1)
Michigan	10,389,029.43	1,524,557.49	.....	2,080,742.43	2,080,742.43
Minnesota	1,411,889.00	429,800.00	49,842.00	62,000.00	358,000.00
Missouri	522,500.00	55,000.00	37,500.00	75,000.00	75,000.00
Montana	2,224,050.72	102,475.00	33,000.00	462,000.00	440,000.00
Nebraska	(1)	(1)	(1)	(1)	(1)
Nevada	38,000.00	[3] 17,256.79	3,000.00	25,000.00	25,000.00
New Mexico	157,000.00	30,000.00	(1)	50,000.00	50,000.00
North Dakota	(1)	(1)	(1)	(1)	(1)
Ohio	31,175,968.53	6,384,355.74	2,684,593.81	8,702,303.46	8,593,303.46
Oregon	1,615,000.00	1,122,817.65	(1)	1,365,000.00	1,365,000.00
South Dakota	(1)	(1)	(1)	(1)	(1)
Utah	[2] 541,500.00	6,899.27	(1)	10,500.00	10,500.00
Washington	[2] 1,555,000.00	509,146.50	(1)	133,274.00	35,000.00
Wisconsin	281,078.00	40,201.00	16,050.00	21,500.00	21,500.00
Wyoming	(1)	(1)	(1)	(1)	(1)
Total	128,767,414.57	28,949,759.48	9,214,166.62	24,960,869.20	25,611,229.42

[1] None reported. [2] Including State bonds. [3] Expended in early part of 1915.

The total road mileage in the Central, Mountain, and Pacific States as of January 1, 1915, exclusive of streets in incorporated cities and towns, was 1,358,706, of which 134,141.74 miles, or 9.87 per cent were surfaced The total road mileage and the mileage surfaced to the close of 1914, and percentage of surfaced roads for 1909 and 1914 are shown for this group of States in Table 4. Detailed information on this subject is presented by counties under the State headings. The percentage of roads surfaced for the years 1904, 1909, and 1914 for these States is shown in figure 1.

TABLE 4.—*Road mileage.*

State.	Total road mileage, end of 1914.	Surfaced road mileage, end of 1914.	Percentage surfaced.	
			1909.	1914.
Arizona	12,075	253.43	4.56	[1] 2.09
California	61,039	10,279.73	17.87	[1] 16.84
Colorado	39,780	1,193.87	1.08	3
Idaho	24,396	679	2.77	2.78
Illinois	95,647	11,606.31	9.47	12.02
Indiana	73,347	30,962.4	36.7	42.2
Iowa	104,074	614.57	2.45	0.59
Kansas	111,052	1,148.85	0.38	1.03
Michigan	74,190	7,828.51	10.01	10.55
Minnesota	93,517	3,967.83	6.83	[1] 4.24
Missouri	96,041	6,712.57	4.4	6.98
Montana	39,204	609.25	0.41	1.55
Nebraska	80,272	1,204.54	0.31	1.5
Nevada	12,182	262	0.36	2.14
New Mexico	11,873	261.5	0.61	2.2
North Dakota	68,796	955	0.23	1.38
Ohio	86,354	30,569.17	27.13	35.16
Oregon	36,819	4,726.4	9.49	12.83
South Dakota	96,306	363	0.5	0.37
Utah	8,810	1,153.75	12.23	13.09
Washington	42,428	4,922.09	13.19	[1] 11.61
Wisconsin	75,707	13,399.47	16.64	17.6
Wyoming	14,797	468.5	3.94	[1] 3.16
Total average	1,358,706	134,141.74	8.91	9.87

[1] Decrease in surfaced mileage reported does not mean retrogression, but is accounted for by higher standard requirements and greater accuracy of reports in 1914 as compared with previous reports.

The relation of total mileage and surfaced mileage to area and rural population in Central, Pacific, and Mountain States, for the years 1904, 1909, and 1914, is presented in Table 5.

TABLE 5.—*Relation of total mileage and surfaced mileage to area and rural population.*

State.	Total mileage.				Surfaced mileage.			
	Per square mile of area.		Per 1,000 of rural population.		Per square mile of area.		Per 1,000 of rural population.	
	1904	1914	1904	1914	1904	1914	1904	1914
Arizona	0.05	0.11	58.1	85.5	0.002	0.002	2.10	1.79
California	.29	.39	65.9	67.2	.056	.066	12.45	11.32
Colorado	.30	.38	108.3	100.9	.002	.011	.64	3.02
Idaho	.20	.29	119.6	95.4	.002	.008	1.39	2.65
Illinois	1.6	1.71	42.6	44.2	.141	.207	3.59	5.37
Indiana	1.9	2.03	41.3	47.1	.662	.858	14.44	19.88
Iowa	1.84	1.87	61.7	67.3	.029	.001	1	.39
Kansas	1.2	1.35	88.8	92.7	.003	.014	.24	.96
Michigan	1.2	1.29	47.2	50	.122	.136	4.78	5.28
Minnesota	1	1.15	68.7	76.3	.077	.036	5.42	2.42
Missouri	1.5	1.39	54.6	50.6	.039	.097	1.38	3.54
Montana	.15	.27	141.2	161.5	.0004	.004	.41	2.51
Nebraska	1	1.04	97.6	91	.0003	.001	.03	1.36
Nevada	.11	.11	358.1	177.8	.0006	.002	1.82	3.82
New Mexico	.12	.09	91.3	42.3	.0002	.002	.01	.93
North Dakota	.84	.98	200.6	133.8	.003	.013	.71	1.86
Ohio	1.79	2.12	32.1	41	.575	.750	10.86	14.54
Oregon	.36	.38	122.2	100.6	.027	.049	9.23	12.89
South Dakota	.7	1.25	164.4	189.8	.002	.004	.42	.72
Utah	.08	.11	41.3	43.9	.007	.014	3.55	5.76
Washington	.48	.63	104.3	79	.029	.073	6.44	9.17
Wisconsin	1.17	1.37	49.7	56.9	.192	.242	8.31	10.08
Wyoming	.1	.15	158.5	144.8	.0015	.005	2.32	4.56
Total average	.61	.70	63.9	68.2	.051	.069	5.33	6.74

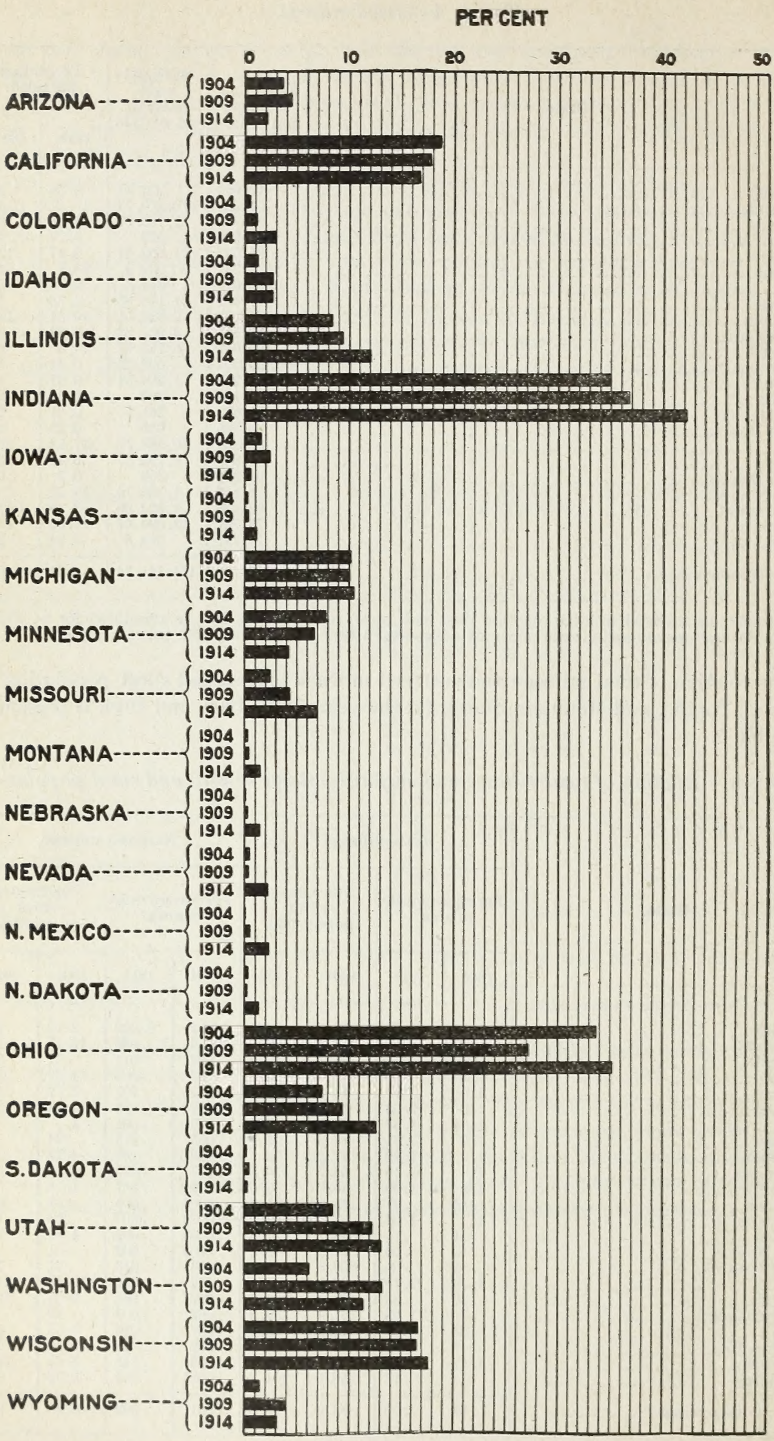

FIG. 1.—Percentage of surfaced roads in the respective States.

Of the 134,141.74 miles of surfaced roads, at the close of 1914, in the Central, Pacific, and Mountain States, 78,825.34 miles, or 58.77 per cent, were of gravel; 31,882.24 miles, or 23.77 per cent, macadam; 13,192.02 miles, or 9.84 per cent, sand-clay; 2,949.64 miles, or 2.20 per cent, bituminous macadam; 1,789.20 miles, or 1.33 per cent, concrete; 794.82 miles, or 0.59 per cent, brick; and 4,708.47 miles, or 3.5 per cent, surfaced with other materials. The distribution of types of surfaced roads as of January 1, 1915, is shown by States in Table 6.[1]

TABLE 6.—*Distribution of types of surfaced road, 1914.*

State.	Type.							
	Macadam.	Bituminous macadam.	Gravel.	Sand-clay.	Brick.	Concrete.	Miscellaneous.	Total.
Arizona	11.23	13.5	125.7	45	.....	.....	58	253.43
California	837.4	877.9	3,563.59	582.25	.....	929.19	a3,489.4	10,279.73
Colorado	3	.....	574.25	450.12	.....	2.25	164.25	1,193.87
Idaho	42.5	12	168	449	.....	4.5	3	679
Illinois	1,675.11	121.53	7,052.3	2,467.95	82.92	148.8	57.7	11,606.31
Indiana	10,291.29	168.35	20,264.59	150.25	34.75	53.17	.....	30,962.4
Iowa	171.3	.....	413	23	.....	5.77	1.5	614.57
Kansas	194.3	.....	151.85	758.5	4.1	1.35	38.75	1,148.85
Michigan	1,021.19	94.5	5,230.25	1,375.27	.....	107.3	.....	7,828.51
Minnesota	120.25	19	2,825.25	985.33	.5	17.5	.....	3,967.83
Missouri	1,531.05	59	3,671.5	1,442.25	1	2.77	5	6,712.57
Montana	78	.....	514.25	14	.....	.....	3	609.25
Nebraska	39.21	1.3	21	1,131.1	2.4	7.53	2	1,204.54
Nevada	2	.....	193	67	.....	.....	.....	262
New Mexico	.....	5	184	72.5	.....	.....	.....	261.5
North Dakota	.....	.....	955	.....	.....	.....	.....	955
Ohio	12,903.87	1,066.29	15,385.93	211	640.41	315.67	46	30,569.17
Oregon	1,000.72	137.25	3,060.15	300	.....	28.41	199.87	4,726.4
South Dakota	.....	10	212	129	.....	.....	12	363
Utah	49	15.5	685.75	401	.....	2.5	.....	1,153.75
Washington	502.82	165.52	3,924.48	83.50	26.35	79.42	140	4,922.09
Wisconsin	1,408	183	9,597	2,054	2.4	83.07	72	13,399.47
Wyoming	.....	.....	52.5	.....	.....	.....	416	468.5
Total	31,882.24	2,949.64	78,825.34	13,192.02	794.82	1,789.20	4,708.47	134,141.74
Per cent	23.77	2.2	58.77	9.84	.59	1.33	3.5	100

a Oiled earth.

Detailed information regarding sources and amounts of revenues, bonds issued and outstanding, total mileage of roads, and mileage surfaced, systems of administration, and other factors affecting road improvement, is presented under the respective State headings.

ARIZONA.[2]

Arizona has a land area of 113,810 square miles, a total road mileage of 12,075, of which 253.43 miles, or 2.09 per cent, were surfaced at the close of 1914.

The State engineer is appointed by the governor, by and with the consent of the senate. He is required to be a practical and competent civil engineer, and serves for a term of two years. His duties are to aid the State board of control and the boards of supervisors of the several counties in the selection and designation of State highways and bridges, which are defined to be all highways and parts of highways and bridges heretofore constructed by the Territory or State of Arizona or that may be built hereafter by the State. The boards of supervisors are required to act with the State engineer in the selection of the highways and bridges to be constructed

[1] The tables referred to hereafter in the text will be found in the appendices: Those referring to road mileage are grouped in Appendix A, those referring to revenues expended in Appendix B, and those referring to bond issues in Appendix C.

[2] In collecting the information for Arizona assistance was rendered by Lamar Cobb, State engineer, and collaborator of the U. S. Department of Agriculture.

in their respective counties, and the State engineer, on request of the State board of control or the board of supervisors of any county, is required to map, plat, and furnish estimates of the cost of construction of any such highway.

All improved State highways and bridges are maintained at the expense of the county wherein located out of the State road tax fund apportioned to such county, under the joint direction of the State engineer and the board of supervisors. An annual State tax of $250,000 is levied for the State road tax fund. Twenty-five per cent of this fund is expended wholly in the discretion of the State board of control and 75 per cent is apportioned among the several counties in proportion to the amount collected in each and expended by the board of supervisors and the State engineer. The proceeds from the registration and licensing of motor vehicles also are applied to the State road tax fund.

Jurisdiction over roads and bridges in the several counties is vested in the respective boards of supervisors. Each board is authorized to appoint a county engineer, who must be a competent civil engineer and road builder, and serves during the pleasure of the board. The county engineer, under the direction of the board of supervisors, has charge of all highway and bridge work and other engineering construction work undertaken by the county and is required to make all surveys, maps, plans, and specifications required therefor. He may, with the approval of the board of supervisors, appoint necessary assistants.

Special road districts, not exceeding 10 miles in length and 1 mile in width, may be formed upon petition of 25 taxpayers therein to the board of supervisors. The board is required to call an election thereon and a two-thirds vote is necessary to authorize the establishment of such a district. When a special road district is formed a board of three trustees is required to be elected for three years with exclusive charge and control of road work undertaken by the district and of the management and expenditure of its road funds. The district trustees must, on or before July 1 each year, certify to the board of supervisors the amount of money required for road purposes for the ensuing year, and the board of supervisors must levy a land tax in the district sufficient to produce such amount, provided the tax so levied shall not exceed 75 cents on each $100. If the trustees deem it advisable to spend a larger sum than can be made available within the above limitation, for a period not exceeding five years, they must call a special election thereon, and if two-thirds of those voting favor such larger amount the board of supervisors must levy annually for such period upon all taxable lands in the district such a tax as will produce the amount voted; or, in lieu of such additional tax, the trustees may submit the proposition of issuing bonds of the district, which may be done if authorized by a favorable vote of two-thirds of those voting.

The levy and collection of the road taxes within the district shall not exempt the property within such district from the levy and collection of the general county tax by the board of supervisors, provided that the board of supervisors shall appropriate annually to the use of the special road districts such amount as in their judgment is equitable and just, which amount shall in no case be less than 40 per cent nor more than 65 per cent of the amount of road tax levied and collected within said special road district.

The board of county supervisors may levy a property road tax of not to exceed 25 cents on each $100 of real and personal property in the county. In counties having road-fund warrants outstanding and unpaid, such levy may be not to exceed 60 cents on each $100 valuation of real and personal property in the county, one-half of the proceeds to be applied to a fund to be known as the "road warrant redemption fund," and the other half to the general road fund of the county.

No person not a citizen or ward of the United States, or who has not declared his intention to become a citizen, shall be employed upon or in connection with any State, county, or municipal work or employment.

Every able-bodied male over 21 and under 60 years of age residing outside incorporated cities and towns, and not exempt by law, is required to pay a road tax of $2 a year.

Provision is made for the working of State convicts in the construction and maintenance of State highways and bridges under the control and supervision of the board of control and the State engineer. Funds to meet the cost of so working prisoners are provided out of the prison-maintenance fund and the State road-tax fund. Counties receiving the labor of State convicts shall not, during the same fiscal year, be entitled to receive any portion of the State road-tax fund under the board of control, except such as would be a proper engineering charge.

ROAD MILEAGE.

According to the reports received, Arizona had on January 1, 1914, a total of 12,075 miles of public roads, of which 253.43 miles, or 2.09 per cent were surfaced. Of the surfaced roads 11.23 miles were macadam, 13.50 miles were bituminous macadam, 125.7 miles were gravel, 45 miles were sand-clay, 50 miles were cinders, 7 miles were oiled gravel, and 1 mile was oiled caliche or gravel. There were also reported 2,695.96 miles of graded and drained earth roads. The total of all public roads reported for 1909 was 5,987 miles, of which 273 miles, or 4.56 per cent, were surfaced, thus indicating that the total mileage increased considerably, while the surfaced mileage is about the same as that reported for 1909. Detailed information in regard to road mileage in Arizona at the close of 1914 is shown by counties in Table 7.

REVENUES APPLIED TO ROADS AND BRIDGES.

The total revenue applied to roads and bridges in 1914 amounted to $982,721.22, of which $523,114.44 was derived from general county road and bridge taxes, $94,930 from per capita and other taxes, $8,780.59 from county bond issue funds, and $355,896.19 from State appropriations, motor vehicle tax, and State road tax. In 1904 Arizona applied $109,309.43 to road and bridge work. The gain in 1914 over 1904 was $873,411.79, or 799 per cent. Revenues applied to roads and bridges are shown in Table 30.

ROAD AND BRIDGE BONDS.

The total county road and bridge bonds outstanding on January 1, 1915, amounted to $295,000. In 1914, $275,000 road and bridge bonds were voted and sold, and $5,000 retired. Only $8,780.59 was expended from bond funds during 1914. The bond transactions are shown in Table 53.

CALIFORNIA.[1]

California has a land area of 155,652 square miles, a total road mileage of 61,039, of which 10,279.73 miles, or 16.84 per cent, were surfaced at the close of 1914.

There is a department of engineering, which consists of an advisory board, composed of the governor, as ex officio member and chairman, the State engineer, the general superintendent of State hospitals, the chairman of the State board of harbor commissioners of San Francisco, and three other members. The State engineer and three members are appointed by the governor, and serve during his pleasure. The department of engineering, by and through the chairman of the advisory board, is authorized to appoint a State highway engineer, skilled and experienced in highway construction. The department also is authorized to appoint assistant engineers and other assistants as needed. All State highway work is under the direction and supervision of the department of engineering, which is charged by the legislature with the duty of acquiring, constructing, and maintaining a system of State highways, for which an issue of $18,000,000 of State bonds has been authorized. This duty is exercised by

[1] In collecting the information for California assistance was rendered by A. B. Fletcher, State highway engineer, and collaborator of the U. S. Department of Agriculture.

this department through its three appointed members, who are desingated as the California Highway Commission. The State highway engineer, subject to the direction of the commission, has immediate charge of constructing the system of State highways. A statute also exists authorizing the State to aid counties to the extent of paying one-third of the cost of certain roads, but the legislature has failed to appropriate the funds necessary to make this statute operative.

General jurisdiction and control of county roads and bridges vests in boards of supervisors. These boards divide their respective counties into road districts, and each supervisor is ex officio road commissioner in his supervisor district, in charge of the highways and bridges under the direction and orders of the board of supervisors.

Boards of supervisors may establish road improvement districts on declaration of intention so to do and hearing thereon. If a majority of the landowners within the proposed district protest in writing against the ordering of the proposed work as an entirety the board can not proceed further for a period of one year. Improvements made in road-improvement districts are paid for by bonds which are redeemed, both interest and principal, from a special fund constituted partly by transfer from the county road funds and partly by levy of special assessment taxes upon all land in the district. A superintendent of work is appointed by the board of supervisors, which also may appoint an engineer, to be designated "engineer of work."

A board of supervisors, on receiving a petition signed by freeholder electors equal in number to 10 per cent of the vote cast for governor in said county at the last election, praying that the matter of issuing bonds of the county for highway purposes be submitted to the electors of the county, may appoint as a highway commission three residents and freeholders especially qualified to have charge of the improvement of highways and to serve for a term of two years. This commission shall investigate immediately the main public highways of the county and their connections and ascertain which should be improved by the issuance of bonds, the kind of improvement that should be made and the probable cost. With the consent of the board of supervisors, the commission may employ a competent engineer and other necessary assistants. The commission then must report to the supervisors the highways proposed to be improved and the amount that should be raised by the issuance of bonds. If the board of supervisors approve and adopt the report, the proposition of issuing bonds shall be submitted to an election. After such roads are improved the board of supervisors may appoint a superintendent or inspector to have charge of the work of maintaining and repairing them.

Boulevard districts may be formed by the board of supervisors of any county when petitioned by not less than 25 freeholders in the proposed district, and after hearing and submitting the proposition to an election. A majority vote is necessary to authorize the formation of such a district. At such election three persons shall be elected to constitute a boulevard commission. Each boulevard district may lay out, establish, construct, acquire, and maintain one or more boulevards. The boulevard commission may call an election on the question of issuing bonds of the district to pay for such improvements. A two-thirds vote of those voting is required to authorize the issue of such bonds. The boulevard commission is required each year to furnish the board of supervisors with an estimate of the amount of money that will be needed the ensuing fiscal year, and the supervisors must levy a tax on the assessed value of the real property of the district sufficient to raise the amount. A boulevard district may be dissolved at any time on a vote of two-thirds of the qualified electors residing therein.

Permanent road divisions may be formed by the board of supervisors on petition signed by a majority of the landowners residing in the proposed division and after hearing thereon. Special taxes may be levied or bonds issued in such divisions, if authorized at an election held thereon, a majority vote of those voting being necessary to authorize the tax and a two-thirds vote in the case of bonds.

The board of supervisors may establish a general road fund and order apportioned thereto an amount not exceeding 35 per cent of the aggregate road taxes collected from all sources. The general road fund is applied in the following manner: First, in the payment of the cost of general county road improvements; second, in assisting weak and impoverished districts; and third, in payment of such demands as are payable by law out of the general road fund.

Boards of supervisors may levy an annual property road tax of not to exceed 40 cents on each $100 of assessed valuation of the county, and also a road poll tax of $3 on every male over 21 and under 55 years of age not exempt by law. Thirty-five per cent of the proceeds of each levy goes into the general road fund. Boards of supervisors may levy a special road fund tax of not to exceed 2 mills on each dollar of assessed valuation of the county, outside of incorporated towns or cities, which shall be expended in the several districts in proportion to the amounts collected in each district. In addition, on petition of a majority of the property owners of any road district, a special road tax of not to exceed 2 mills on each dollar of assessed valuation in the district may be levied by the board. One-half of the net receipts from the registration and licensing of motor vehicles is paid to the counties from which collected, to be used for road and bridge purposes, and the other half is used by the department of engineering for the maintenance and improvement of State highways.

Bonds may be issued for road purposes by boards of supervisors, after having submitted the question to a vote of the people and having received a favorable vote of two-thirds of those voting. The bonded indebtedness of a county at no time shall exceed 5 per cent of its taxable property valuation. Whenever any county highway is improved under a county bond issue, which issue covers all property of the county, the board of supervisors shall provide a continuous system for the maintenance of such highways and may levy annually for that purpose a tax of not to exceed 7 cents on each $100 valuation of the county for each 100 miles of such improved highways therein.

No person not a native-born or naturalized citizen of the United States can be employed in any department of the State, county, or city governments.

Provision is made for utilizing the labor of both State and county convicts in highway work.

ROAD MILEAGE.

According to the reports received, California had at the close of 1914 a total of 61,039 miles of public roads, of which 10,279.73 miles, or 16.84 per cent, were surfaced. Of the surfaced roads 929.19 miles were concrete, 837.4 macadam, 877.9 bituminous macadam, 3,563.59 gravel, 582.25, sand-clay, and 3,489.4 oiled earth. There was also reported 18,389 miles of graded and drained earth roads. In 1909 California reported 48,069 miles of public roads, of which 8,587 miles, or 17.87 per cent, were surfaced, thus indicating a gain in surfaced roads for the five-year period of 1,691.98 miles in spite of the fact that several counties reported a larger mileage of surfaced roads in 1909 than was reported for 1914. This is shown in Table 8.

REVENUES APPLIED TO ROADS AND BRIDGES.

The total revenue applied to roads and bridges in the fiscal year ended June 30, 1915, amounted to $19,171,984.66, exclusive of San Francisco County, which is coextensive with the city of San Francisco. It was impossible to secure this infornation for the calendar year 1914. Of this amount, the counties expended from revenues derived from taxation and bond issues, $9,790,238.42 for highways and $2,531,148.63 for bridges, and the State expended $6,850,597.61, of which $6,488,217.13 was for the construction of State highways and $362,380.38 was for the construction and maintenance of State roads. The funds used in the construction of State highways was derived from the $18,000,000 State bond issue. Of the funds used in the construction

and maintenance of State roads $307,398.71 was derived from automobile license fees and $54,981.77 from special appropriations by the State legislature. The total revenue applied to roads and bridges in 1904 amounted to $2,157,396.36, an increase in the 10-year period of $17,014,588.30, or 786.6 per cent. Detailed information on this subject is presented in Table 31.

ROAD AND BRIDGE BONDS.

The total road and bridge bonds outstanding in the early part of 1915 amounted to $32,277,000, of which the counties had issued $14,277,000 and the State $18,000,000. In 1914 the counties expended from bond funds a total of $2,397,975.43, and the State expended from State bonds $6,488,217.13. In the same year there was voted and sold by the counties $2,712,000, and there was retired $271,000 road and bridge bonds. The term of State bonds is 50 years, and rate of interest 4 per cent. They are to be paid off in annual installments of $400,000 after July 1, 1917. Details of county bond issues are presented in Table 54.

COLORADO.[1]

Colorado has a land area of 103,658 square miles, a total road mileage of 39,780, of which 1,193.87 miles, or 3 per cent, were surfaced at the close of 1914.

The State highway commissioner is appointed by the governor for a term of four years. The governor also appoints an advisory board of five members, one from each of five districts of the State and one of whom is retired each year. The State highway commissioner and the advisory board appoint a secretary who must be a civil engineer, and other necessary help. It is the duty of the State highway commissioner and his assistants to give such advice, assistance, and supervision regarding road construction, improvement, and maintenance throughout the State as time and conditions may permit. The board of commissioners of each county is required to prepare and forward to the State highway commissioner a map showing all roads of the county and indicating those of sufficient importance to receive State aid. The State highway commissioner is required on or before January 1 of each year to have on file in his office a map showing all the roads in each county, and in color those he deems to be of sufficient importance to receive State aid and which, when completed, will provide an adequate system of State roads. Such roads may be divided into two classes: First, those of primary importance, and, second, those of secondary importance. Unless otherwise directed roads of primary importance shall be improved first. On the 1st day of March each year the State highway commissioner and the advisory board apportion the State road fund among the different counties of the State and notify the board of commissioners of each county of the amount apportioned thereto. In making the apportionment, population, area, amount expended by each county on roads, and the difficulty of road construction in each county are considered. The boards of county commissioners make all surveys, plans, specifications, and estimates for all work on State roads in their respective counties, in accordance with rules and regulations prescribed by the State highway commissioner and the advisory board, and all work on such roads in the several counties is under the county board. The county boards of the respective counties are authorized to employ a county engineer to have charge of all such work under their direction.

Jurisdiction over roads and bridges in the several counties is exercised by the boards of county commissioners, who may divide their counties into suitable road districts and appoint a road overseer for each district. A county road supervisor may be elected by the county board of commissioners of each county, except in counties whose boundaries coincide with the boundaries of a city and counties in which revenues for road purposes are less than $12,000. The supervisor so elected must be a

[1] In collecting the information for Colorado assistance was rendered by J. E. Maloney, State highway engineer, and collaborator of the U. S. Department of Agriculture.

practical road builder and shall have charge of all matters pertaining to roads in the county, subject to the county board, and shall have power to form road-dragging districts.

Counties may be organized into corporate road districts by the boards of county commissioners on petition signed by a majority of the qualified voters of the county. In counties so organized into road districts, the office of road overseer is abolished, and the county commissioners appoint a superintendent of roads and bridges. There is elected in each such road district a board of directors, consisting of three members, to have complete control of all public roads and bridges within the district, except as limited by law. A special property road tax is levied by the board of county commissioners in such district in such amount as requested in writing by the board of directors, but not to exceed 50 cents on each $100 of taxable valuation. Also, all able-bodied men over 21 and under 50 years of age in each such district are required to pay an annual road tax of $3 or work two days on the public roads.

Public improvement districts may be formed in a county when authorized by a special election of property owners called for that purpose by the county board of commissioners. A majority vote of those voting at such election is necessary to authorize the formation of such districts. Such districts may issue bonds, but the amount to be issued must have been specified in the call for the election.

Any city or incorporated town may aid in the construction and repair of any highway leading thereto by appropriating therefor not exceeding 50 per cent of the highway tax belonging to said city or incorporated town. Such aid shall not be extended beyond 2 miles from the corporate limits, and then only on petition to the council or trustees and after having received the favorable vote of a majority of those voting at an election held thereon.

A State levy of one-half mill is made annually upon all taxable property in the State and the proceeds applied to the State road fund. Also, all money accruing to the internal improvement permanent fund and the internal improvement income fund is applied to the State road fund. Fifty per cent of the revenue collected from the registration of motor vehicles is paid to the several counties in proportion to the amounts collected therein, and the other 50 per cent is applied to the State road fund.

The boards of county commissioners may levy a property road tax in their respective counties of not to exceed $1 on every $100 of taxable valuation. County boards of commissioners may issue road bonds when authorized by a majority of those voting at an election called thereon, but the amount of such bonds, including the existing indebtedness, shall not exceed $6 on each $1,000 in counties where the taxable valuation exceeds $5,000,000, and $12 on each $1,000 in counties where the taxable valuation is less than $5,000,000 and more than $1,000,000.

Except in corporate road districts, every able-bodied man between the ages of 21 and 45 years, not exempt by law, is required to pay to the road overseer of his district $2 or perform two days' work on the public roads of his district.

Provision is made for the working of both State and county convicts on public highways.

ROAD MILEAGE.

At the close of 1914 Colorado had, according to reports received, 39,780 miles of public road, of which 1,193.87, or 3 per cent, were surfaced. Of the surfaced roads 574.25 miles were gravel, 450.12 miles sand-clay, 2.25 miles concrete, 3 miles macadam, and 164.25 miles were surfaced with other materials. There were also reported 12,104.85 miles of graded and drained earth road.

Reports received from the various counties in 1909 indicated that Colorado at that time had 320.5 miles of surfaced road, indicating a gain from 1909 to 1914 of 873.37 miles of surfaced road. Information regarding the road mileage for 1914 is presented in Table 9.

REVENUES APPLIED TO ROADS AND BRIDGES.

The total revenue applied to roads and bridges in 1914 amounted to $1,937,546.23, of which $1,553,655.91 was derived from the general county road and bridge tax; $25,040.36 was received by counties from motor-vehicle licenses; $56,340.85 was received by counties from the forest-reserve fund; $285,851.61 was received by counties from the State fund; $15,423 was appropriated by the State for the administration of the State highway department; and $1,234.50 was expended from the bond-issue fund in Garfield County. The total revenue applied to roads and bridges in 1904 amounted to $707,223.63, a gain within the 10-year period of $1,230,322.60, or 173.96 per cent. Detailed information in regard to revenue applied to roads and bridges is shown by counties in Table 32.

ROAD AND BRIDGE BONDS.

The total road and bridge bonds outstanding on January 1, 1915, amounted to $90,500, of which $55,500 was for Garfield County and $35,000 for San Miguel County. Bonds in both counties bear 6 per cent and the Garfield County bonds run for 20 years. There was expended during the year 1914, $1,234.50 from the bond-issue funds in Garfield County. No State road and bridge bonds have been issued.

IDAHO.[1]

Idaho has a land area of 83,354 square miles, and a total road mileage of 24,396, of which 679 miles, or 2.78 per cent, were surfaced at the close of 1914.

The State highway commission consists of the secretary of state, who is ex officio a member and secretary, and two other members appointed by the governor for terms of three years. The commission appoints a State highway engineer, who is the executive officer of the commission and may be removed by it. The State highway commission, acting through its executive officer, has general powers and jurisdiction over the laying out, constructing, improving, and maintaining of a system of State highways and bridges and the expenditure of State highway funds. The commission is authorized to appoint such assistant engineers and other assistants as may be necessary and also to advise, assist, and cooperate with local road officials in all matters pertaining to highway and bridge construction and maintenance.

A system of State highways, to consist of main trunk lines connecting the larger centers of population, was to be selected by the State highway commission and plans prepared therefor. All highways constructed by the State or by the aid of the State are State highways and shall be maintained at the sole expense of the State. Where highways are built by the State in cooperation with a county or a highway district or a good-road district in any county, the county must pay, if the cooperation is with a county, not less than two-thirds of the cost, and the district must pay, if the cooperation is with a district, not less than one-half the cost, if the taxable valuation of the district is $1,000,000 and less, and not less than two-thirds of the cost if the taxable valuation of the district is more than $1,000,000. State bonds are authorized to pay a portion of the cost of constructing the system of State highways. A State highway fund is created for a like purpose.

The board of county commissioners in each county is vested with jurisdiction in all matters pertaining to roads and bridges therein. Boards of county commissioners may divide their respective counties into suitable and convenient road districts and appoint one road overseer for each district. The road overseers are subject to removal by the board of county commissioners. A board of county commissioners may appoint a road supervisor for the county who shall have immediate control of all road and bridge work in the county under the board of county commissioners.

[1] In collecting the information for Idaho assistance was rendered by E. M. Booth, State highway engineer, and collaborator of the U. S. Department of Agriculture.

Highway districts may be formed in any county when petitioned for by 50 or more holders of title or evidence of title to lands wholly within the limits of a single county and aggregating not less than 20,000 acres of contiguous territory and at least one-tenth of the total acreage of the proposed district. An election and a favorable vote of a majority of those voting is necessary before a highway district may be formed. Three highway commissioners shall be elected in each district for terms of four years each. The highway commissioners of each district constitute the highway board and have full power and authority to construct, maintain, repair, and improve all highways within the district. As soon as possible after the organization of the highway district, the highway board appoints a director of highways, skilled by experience in road construction and maintenance, who serves for a term of four years and has immediate control of all highways within the district.

The highway board may levy a property road and bridge tax which shall not exceed 25 cents for roads and 10 cents for bridges on each $100 taxable property in the district, but the levy for roads shall not, when added to the amount of levy made by the county commissioners for road purposes that year, exceed 40 cents on the $100. The highway board may, however, by resolution, levy a special property road tax of not to exceed 25 cents on each $100 of all taxable property in the district outside the limits of any municipality; or, if not on all taxable property of the district, on petition of a majority of the resident taxpayers of any division of the district, such special tax may be levied in an amount not to exceed 25 cents on the $100 of taxable property in such division, provided that no levy shall be made which, with the amount of any special levy made by the board of county commissioners for that year, will exceed 25 cents on the $100. Bonds in an amount not to exceed 10 per cent of the assessed valuation may be issued and outstanding at any one time, if authorized by a two-thirds majority at an election thereon; and, if stated in the order of election, part of the taxes necessary to pay the interest and principal of such bonds may be levied on lands abutting the roads improved from the proceeds thereof.

A special good-road district may be created in any county for the purpose of improving any or all of the public roads therein on petition to the county board of commissioners, signed by a majority of all the freeholders residing within the proposed district. After a hearing an election is held to determine if such district shall be formed and to elect three good-road commissioners. A majority vote is required to authorize the formation of such district. The board of good-road commissioners shall have authority, by and with the consent of a two-thirds majority at an election called thereon, to issue bonds for improving the roads of such district, in an amount not to exceed 25 per cent of the assessed value of real property in the district.

From the road taxes collected from all sources, the board of county commissioners may set apart annually not to exceed 25 per cent of the aggregate for general county road purposes.

The board of county commissioners may levy an annual property road tax of not less than 10 nor more than 100 cents on each $100 of taxable valuation of the county. If the road fund or the bridge fund of the county becomes unreasonably burdened by the expense of constructing, maintaining, or repairing any road or bridge, a special tax may be levied not to exceed one-half of 1 per cent on the taxable property of the county.

The board of county commissioners in any county may levy a special property highway tax of not to exceed 100 cents on each $100 of assessed property valuation outside the limits of incorporated towns or villages. In the event that said board deems it inadvisable to levy such a tax on the county, the levy may be made by the board in any road district or districts, if petitioned for by a majority of the resident taxpayers thereof, the amount of taxes that may be thus levied to be as set forth in the petition, but not to exceed 100 cents on each $100. The proceeds of such levy, when made

within a district, shall be expended only within the district, and if a majority of the resident taxpayers so petition may be paid in labor.

The board of county commissioners levies a road poll tax of not to exceed $4 upon each able-bodied male from 21 to 50 years of age within the county, including those residing in incorporated cities, towns, and villages. Of such taxes collected within any incorporated city, town, or village, 75 per cent shall be paid to such municipality for the benefit of its road fund.

County boards of commissioners may issue bonds for road purposes when authorized by a two-thirds majority vote at an election called thereon.

Authority is granted for the working of both State and county prisoners on the public highways.

ROAD MILEAGE.

At the close of 1914 Idaho had a total of 24,396 miles of public roads, of which 679 miles, or 2.78 per cent, were surfaced. Of the surfaced mileage 42.5 miles were macadam, 168 gravel, 449 sand-clay, 12 bituminous macadam, 4.5 concrete, and 3 miles cinders. There were also reported 4,399 miles of graded and drained earth road. The total of all public roads for the year 1909 amounted to 18,403, of which 510.5 miles, or .77 per cent, were surfaced, showing an increase in surfaced mileage in the five-year period of 168.5 miles. Detailed information regarding road mileage for 1914 is presented by counties in Table 10.

REVENUES APPLIED TO ROADS AND BRIDGES.

The total revenue applied to roads and bridges in 1914 amounted to $1,371,468.59. Of this amount $776,600.87 was derived from the regular county road and bridge tax, $319,055.60 from special taxes and other sources, $226,000 from county and district road and bridge bond funds, and $49,812.12 from State appropriations expended under the direction of the State highway department for State-aid roads. Of the latter amount $21,733.21 was for construction, $21,713.44 for engineering, and $6,365.47 for administration. The engineering expenses were incurred in laying out a system of State highways on which future appropriations are to be applied. In 1904 the total revenue applied to roads amounted to $311,588, showing an increase for the 10-year period of $1,059,880.59, or 340 per cent. Detailed information showing the revenues applied to roads and bridges during 1914 is presented by counties in Table 33.

ROAD AND BRIDGE BONDS.

The total State, county, and district road and bridge bonds outstanding on January 1, 1915, amounted to $1,339,000, of which counties and districts issued $834,000 and the State $505,000. The State bonds were issued between 1905 and 1913, and bear from 4 to 5 per cent interest. They are all sinking fund bonds with call provisions and terms extending from 5 to 30 years. In 1914 there was expended from local bond funds $226,000, there was voted $425,000, and there was sold $375,000. The terms of the bonds sold during 1914 were from 10 to 20 years and the interest rate varied from 5 to 6 per cent. No State road and bridge bonds were issued in 1914. Detailed information regarding road and bridge bonds is shown by counties in Table 55.

ILLINOIS.[1]

Illinois has a land area of 56,043 square miles, a total road mileage of 95,647, of which 11,606.31 miles, or 12.02 per cent were surfaced at the close of 1914.

The governor, by and with the advice and consent of the senate, appoints the State highway commission of three members, who serve six years each. One member

[1] In collecting the information for Illinois assistance was rendered by Wm. M. Marr, State highway engineer, and collaborator of the United States Department of Agriculture.

shall be designated as president of the commission. The governor also appoints a chief State highway engineer and an assistant State highway engineer. The State highway commission has general supervision of highways and bridges constructed, improved, and maintained in whole or in part by aid of State moneys; aids local road officials by giving advice and causing to be prepared plans, specifications, and estimates for highway and bridge work; lets all contracts for the construction or improvement of State-aid roads, and prescribes a uniform system of auditing and accounting for all road and bridge moneys. The chief State highway engineer and the assistant State highway engineer are the administrative and technical agents of the State highway commission. All subordinate appointments in the State highway department are subject to the State civil-service laws.

Public highways, or sections thereof, including bridges, may be laid out, improved, or constructed at the joint expense of the State and any county, the State contributing one-half the expense and the county or counties through which the highway or a portion thereof passes, one-half. The boards of the several counties designate and indicate on a map public highways within their respective counties of sufficient importance to receive State aid; but the total mileage of highways so designated in any county may not exceed 15 per cent of the total road mileage in counties of the first class; 20 per cent in counties of the second class, and 25 per cent in counties of the third class. The board of supervisors or county commissioners, as the case may be, specify the type of improvement to be made, which is final and not subject to change by the State highway commission; but decision as to type shall not be made until the board has secured from the commission detailed estimates of the cost of the several types of road. If earth roads are specified and built, the county pays all maintenance cost; but if gravel or macadam is specified and constructed the State pays one-half of the maintenance cost.

Appropriations made by the general assembly for State aid are apportioned by the State highway commission to the several counties in the ratio that the total amount levied and collected for roads and bridges in each county bears to the total amount so levied in the State for roads and bridges. The amounts so apportioned are duplicated by the counties and used in constructing State-aid roads. If a county desires to improve its State-aid roads more rapidly than can be done with its annual apportionment, it does so by advancing the necessary funds out of any county funds available, or by issuing county bonds. Before bonds are issued, however, an election must be called thereon, and a majority of those voting must favor the proposition. Counties so expediting the improvement of their State-aid roads are entitled thereafter to receive their apportionment of State aid until the State has contributed its portion of the cost thereof. Improvements are initiated by the county boards by passing a resolution requesting State aid. The State highway commission causes necessary surveys, plans, specifications, and estimates to be made.

In each county of the State there is a county superintendent of highways, appointed in the manner following: The county board of each county submits to the State highway commission a list of from three to five persons, residents of the county. The State highway commission, by competitive examination, selects from among the names submitted those best fitted for said office and so certifies to the county board submitting the list, which appoints from the number found eligible one superintendent of highways for a term of six years and subject to removal.

The county superintendent of highways is required, subject to the rules and regulations of the State highway commission, to prepare plans, specifications, and estimates for all bridges to be built by the county, to be approved by the State highway commission before adoption; to act for the county in all road and bridge matters and advise town and district highway commissioners in regard to highway and bridge work; to supervise the repair and maintenance of all State-aid roads within the

county, subject to the direction of the State highway commission; and to perform such other duties as may be prescribed by law, the rules and regulations of the State highway commission, or the direction of the State highway engineer.

The powers of the county as a body corporate and politic, in counties not under township organization, are exercised by the board of county commissioners, and, in counties under township organization, by the board of supervisors, which is composed of the town and such other supervisors as are or may be elected.

For all purposes relating to the construction, repair, maintenance, and supervision of roads and bridges, the several towns in counties under township organization and road districts in counties not under township organization are, as near as may be, regarded as analogous in corporate authority, and the powers and duties of their highway officers are similar in extent and effect. Counties not under township organization are divided into road districts by the county boards. In each township and in each road district there is elected, for terms of three years each, a board of three highway commissioners. These boards have charge of all road and bridge matters in their respective towns and road districts, and are required each year to certify to the county board the taxes necessary to be levied on the property therein for road and bridge purposes; but such tax must not exceed 61 cents on each $100 of assessed valuation, and one-half of the amount collected in any incorporated city, town, or village improving and maintaining its own streets is paid to such municipality and applied to its road fund.

On petition of not less than 25 legal voters of any township or road district, addressed to the town or district clerk, a special election may be called on the question of having a single highway commissioner in such township or road district. A favorable vote of a majority of those voting is required.

On petition of 25 per cent of the landowners who are legal voters in any township or road district to the town or district clerk an election may be called on the question of levying a tax of not to exceed $1 on each $100 of assessed valuation on all property in the town or district for the purpose of constructing and maintaining gravel, macadam, or other hard-surfaced roads, and on petition of the highway commissioners, officially, and of 100 freeholders of any town or district the question of issuing bonds for that purpose may be submitted to an election, a majority vote of those voting being required.

County boards are vested with powers similar to those conferred on boards of highway commissioners with reference to the construction, repair, and maintenence of gravel, macadam, and other hard-surfaced roads in their county, and may assist towns or road districts in the construction of such roads to the extent of 25 per cent of the cost; but the question of a special permanent road tax or of issuing bonds for that purpose must be submitted first to a vote, on petition of 100 landowners who are legal voters of the county.

If the highway commissioners of any township or road district desire to expend on any bridge or approaches thereto a greater sum than is available otherwise, an election may be called and the question of issuing bonds submitted. A favorable vote of a majority of those voting is required.

Not less than $3 nor more than $5 per mile of road is appropriated each year from the road and bridge fund of each township or road district to be known as a "road drag fund" and to be used for dragging earth roads.

In each town or road district a road poll tax of from $1 to $3, payable in cash, may may be imposed on each able-bodied male between 21 and 50 years of age, not exempt by law. One-half of the proceeds of this poll tax collected in any incorporated city, town, or village which improves and maintains its own streets is paid to such municipality and applied to its road fund. The road poll tax, however, may be abolished by a favorable vote of a majority of those voting at an election thereon.

The proceeds from the licensing and registration of motor vehicles is applied to the State road fund.

The constitution limits the amount of indebtedness which may be incurred or outstanding at any one time by any county, township, or other municipal corporation, to not more than 5 per cent of the value of the taxable property therein.

Authorization is given for the working of State convicts in the preparation of road materials and on the public highways.

ROAD MILEAGE.

At the close of 1914 Illinois had 95,647 miles of public road, of which 11,606.31 miles, or 12.02 per cent, were surfaced. Of the surfaced roads, 1,675.11 miles were macadam, 7,052.30 miles gravel, 2,467.95 miles sand-clay, 148.80 miles concrete, 121.53 miles bituminous macadam, 82.92 miles brick, and 57.7 miles surfaced with other material. There were also reported 41,143.31 miles of graded and drained earth road. At the close of 1909 Illinois reported 94,141 miles of public road, of which 8,914 miles, or 9.47 per cent, were surfaced, thus indicating an increase in surfaced road mileage in the 5-year period of 2,692.31 miles. Detailed information in regard to road mileage in 1914 is presented in Table 11.

REVENUES APPLIED TO ROADS AND BRIDGES.

The total revenue applied to roads and bridges in 1914 amounted to $8,734,712.77, of which $7,451,353.18 was received from general county and township taxation; $968,217.18 from State aid, poll tax, special hard-road tax, and other sources; $208,855.41 from bond-issue funds expended by local authorities, and $106,287 expended from State appropriation and automobile revenues for administration, engineering, and miscellaneous equipment by the State highway department. Of the latter sum, $51,735 was expended for administration and engineering and $54,552 for miscellaneous equipment. The total revenue applied to roads and bridges in 1904 amounted to $4,210,950.23, showing an increase in revenue applied to roads and bridges for the 10-year period of $4,523,762.54, or 107.42 per cent. Detailed information showing the receipts from taxation is presented by counties in Table 34.

ROAD AND BRIDGE BONDS.

According to reports received, the total bonds outstanding on January 1, 1915, amounted to $798,761.55; these were issued principally by townships. In 1914 there were voted $3,656,500 road and bridge bonds, which included $2,000,000 for Cook County and $1,500,000 for Vermilion County, which latter were not sold on account of a suit against the county. In 1914 there were sold $199,350 road and bridge bonds and $161,914.34 were retired. Bond-issue funds expended in 1914 amounted to $208,855.41. Detailed information in regard to bond issues is presented by counties and townships in Table 56.

INDIANA.[1]

Indiana has a land area of 36,045 square miles, a total road mileage of 73,347, of which 30,962.4 miles, or 42.2 per cent, were surfaced at the close of 1914.

In every county maintaining free gravel or macadam roads the board of county commissioners appoints a county highway superintendent who has general supervision of the maintenance and repair of all highways, bridges, or culverts of the county maintained or repaired from the gravel road repair fund of the county. His term of office is two years but he may be removed by the board of county commissioners. In counties having less than 200 miles of free gravel or macadam roads the county surveyor may act as county highway superintendent.

The board of county commissioners of each county has power to lay out, construct, or improve any public highway or part thereof within such county upon the presen-

[1] In collecting the information for Indiana assistance was rendered by Edward Barrett, State geologist, and collaborator of the United States Department of Agriculture.

tation of a petition signed by a majority of the resident landowners of the county whose lands lie within 1 mile of the proposed improvement and will be benefited thereby. If the board, after investigation, decides to make such improvements, the cost is assessed against the lands within 2 miles of the improvement, in proportion to the benefits accruing. Such assessments are payable in installments of not to exceed 10 per cent per month, but such of the landowners as may prefer may petition that road bonds be issued to cover such portion of the cost as would be assessed against the lands owned by them.

The county board of commissioners of any county, when petitioned by 50 freeholders, voters of any township or townships contiguous to each other, may submit to the voters of such township or townships the question of building the roads described in the petition, by graveling or macadamizing, under the free gravel-road law. A majority vote is necessary to authorize the undertaking of such work. If the work is authorized, the commissioners may issue bonds of the county to pay therefor, the tax necessary to meet the interest and sinking-fund charges on the bonds to be levied upon the taxable property located within the township or townships in which the improvements are made.

Each township trustee is required to divide his township into any suitable number of road districts, not to exceed four, except townships exceeding 36 square miles in area, which may be divided into not exceeding six road districts. Every two years each road district elects a supervisor. In any township in which the township roads do not exceed 10 miles in length, the township trustee is ex officio road supervisor. The road supervisor, subject to the direction and control of the township trustee, has charge of keeping the roads of his district in good repair.

The county board of commissioners of counties maintaining free gravel and macadam roads may levy a tax of not to exceed 1 cent on each $100 of assessed property valuation for every 10 miles of free gravel and macadam roads in the county, to be used only for the maintenance and repair of such roads. The net proceeds from the registration and licensing of motor vehicles are apportioned to the several counties for road purposes in the following manner: One-third is divided equally among the several counties; one-third is returned to the several counties on the basis of the amount collected in each county, and one-third is apportioned to the several counties in the proportion which the number of miles of free gravel or macadam roads in the county bears to the whole number of such roads in the State.

The township advisory board, on an estimate made by the township trustee, is required to levy annually a road tax of not to exceed 30 cents on each $100 of taxable property in the township outside the limits of incorporated cities and towns. The amount of such tax assessed to any individual on real estate, up to $20, may be worked out as far as practicable in the road district in which such real estate lies, and the amount of such taxes assessed on personal property, up to $20, may be worked out in the district where the owner resides, at the rate of $1.50 a day for each man, provided that the township trustee may, with the consent of the township advisory board, levy an additional tax of not to exceed 10 cents on each $100 of taxable property, to be expended by the township trustee for the construction and repair of bridges and culverts, and for other road purposes.

Each able-bodied male resident of each road district, over 21 and under 50 years of age, not exempt by law, is required to work annually from two to four days on the roads, either in person or by able-bodied substitute, or in lieu thereof to pay $1.50 for each day's labor so required.

There are other special and contingent tax levies and benefit assessments for road and bridge purposes authorized under the law in addition to those mentioned. Various provisions exist under which road bonds may be issued, but the law restricts the amount of such bonds that may be issued, including those outstanding or authorized for issue, to not more than 4 per cent of the total taxable value of the property of the township, townships, or county for whose account the bonds are issued. The

law provides that all road bonds shall be sold by the county treasurer to the highest bidder, but for not less than par.

County prisoners may be worked on the public roads of the county. State convicts may be worked on the public highways of counties upon agreement between the county board of commissioners and the board of trustees of the Indiana reformatory and the board of control of the Indiana State prison.

ROAD MILEAGE.

At the close of 1914 Indiana had 73,347 miles of public road, of which 30,962.40 miles, or 42.2 per cent, were surfaced. Of the surfaced roads, 10,291.29 miles were macadam, 20,264.59 miles gravel, 168.35 miles bituminous macadam, 53.17 miles concrete, 34.75 miles brick, and 150.25 miles sand-clay. There were also reported 17,509.78 miles of graded and drained earth roads. For 1909 Indiana reported 67,996 miles of public road, of which 24,955.75 miles, or 36.7 per cent, were surfaced, indicating a gain in surfaced roads in the five-year period of 6,006.65 miles. Detailed information in regard to road mileage for 1914 is presented in Table 12.

REVENUES APPLIED TO ROADS AND BRIDGES.

The total revenue applied to roads and bridges in 1914 amounted to $14,233,985.93, as follows: General county tax for road repairs, $2,022,117.24; township tax, $1,018,639.26; additional road tax, $446,975.58; revenues derived from automobile license fees, $462,811.08; cash value of statute labor tax, $887,255.79; expended from township bond funds, $8,989,570.98; expended from county bond funds, principally for bridge construction and repairs, $406,616. In 1904 there was applied to roads and bridges, $4,335,108, an increase in the 10-year period of $9,898,877.93, or 228.34 per cent. Detailed information as to taxation and revenue is presented by counties in Table 35.

ROAD AND BRIDGE BONDS.

The total road and bridge bonds outstanding on January 1, 1915, amounted to $42,095,357.34, of which $36,957,686.22 were issued by townships and $5,137,671.12 by counties.

TOWNSHIP BONDS.

Of the township bonds, $3,893,221.31 were voted in 1914, and $7,841,711.53 were sold the same year. The interest rate on the bonds voted and sold in 1914 was 4½ per cent and the term from one to 20 years, the average term being from 10 to 20 years. In 1914 there was expended from township bonds $8,989,570.98, and $5,719,416.47 was retired. Detailed information in regard to township bonds is presented in Table 57.

COUNTY ROAD AND BRIDGE BONDS.

The county bonds were issued principally for the construction and repair of bridges, although some have been issued for the purchase of toll roads and for repairs due to floods. In 1914 there were voted $635,000 and there were sold $777,294. In the same year $406,616 was expended and $237,850 retired.

Information in regard to county bonds was furnished by the State auditor of Indiana, who stated that the information was incomplete.

Details regarding county bonds are given in Table 57A.

IOWA.[1]

Iowa has a land area of 55,586 square miles and a total road mileage of 104,074, of which 614.57 miles, or 0.59 per cent, were surfaced at the close of 1914.

There is a State highway commission composed of three members, one of whom is the dean of engineering of the State college of agriculture and mechanic arts and two

[1] The information relative to the State of Iowa was collected, under the direction of this office, by J. H. Ames, State highway engineer, and collaborator of the U. S. Department of Agriculture.

of whom are appointed by the governor from different political parties for terms of four years each. The duties of the State highway commission are to devise, adopt, and furnish standard plans and specifications for highway construction and maintenance; to collect and disseminate information and give instruction and advice to local highway officials; to appoint such assistants as may be necessary and to have general supervision of the county and township road officials of the State. Standard specifications for all bridges and culverts, railroad overhead crossings or subways, must be furnished by the State highway commission to the counties or railroad companies without cost, and all work on such bridges must be done in accordance therewith.

A law of 1913 provides that the board of supervisors of each county employ an engineer or engineers and select and designate from the highways of their respective counties not less than 10 or more than 15 per cent of the main traveled roads of the county, connecting the principal market places of the county and with the county roads in adjoining counties, to be known as the county road system. It is also required that the roads so designated be plainly marked on a map to be furnished by the State highway commission, which finally is forwarded to the State highway commission for consideration and modification or approval. Other roads in the county are to be known as the township road system. If any county fails so to designate the county road system, the State highway commission does so and charges the cost thereof to the county. All surveys, plans, and specifications for the improvement of the roads embraced in the county road system are subject to approval by the State highway commission.

The board of supervisors of each county has general supervision of its roads, with power to establish, vacate, or change them and to see that the laws in relation thereto are carried out. The board of supervisors of any county may establish a permanent road improvement district or districts and cause the highways therein to be improved by grading, draining, paving, or macadamizing and assess not less than 50 per cent of the cost on abutting or adjacent property and may levy a tax not to exceed 2 mills on each dollar of taxable property in the county, including incorporated cities and towns.

Road districts in townships having created such districts are consolidated into one township road district, and all township road funds belonging to these districts are made a general township road fund. The township trustees in all such townships are required to employ a superintendent of the township road system.

Each year the township trustees of each township select from its township road system the roads to be dragged for the year, to be known as "draggable" roads, which shall include all roads in consolidated school districts and all main routes. The township trustees employ a superintendent or superintendents, not exceeding four, who have general supervision of all dragging and repair work on the township road system and make contracts for the dragging of roads. For these purposes there is expended under the direction of the township trustees through the road superintendent not less than the 1-mill drag tax.

Two days' labor on the roads may be required of each able-bodied male between 21 and 45 years of age, not exempt by law, and a penalty of $3 for each day so required is provided for failure to perform such labor either in person or by able-bodied substitute.

The boards of supervisors of the respective counties levy a tax of 2 mills on the dollar on all taxable property outside the limits of incorporated towns or cities, the proceeds from which constitute the county road-building fund, to be used for the purpose of grading and building roads outside the limits of incorporated cities and towns. The boards of supervisors also levy not more than 1 mill on each dollar of taxable property in their respective counties, including municipalities, for the county-road fund; and on petition of a majority of the electors who are freeholders in any township in the county the board may levy 1 mill additional on property of the

township, to be expended by the board on the roads in such townships; and the boards of supervisors may levy 1 mill additional on all taxable property, including municipalities, for the county-drainage fund, to be used by the board for the drainage of highways and the payment of drainage assessments levied for highway drainage work. One-half of the county road fund arising from the levy on property within any municipality is paid to the treasurer of such municipality, to be used for road and street improvements therein.

The boards of supervisors of the several counties are authorized to make appropriations for bridges as follows: In counties having more than 10,000 and not over 15,000 population, not to exceed $15,000; in counties having over 15,000 population, not to exceed $25,000.

Of the proceeds arising from the registration and licensing of motor vehicles, 90 per cent is apportioned to the respective counties in the ratio that the number of townships therein bears to the total number of townships in the State, and 5 per cent is applied for the maintenance and support of the State highway commission.

The township trustees determine each year the rate of property tax to be levied in their respective townships for road and bridge purposes, but the amount of such tax shall not exceed 4 mills on the dollar. The levy of the township road tax is made in the same manner that the other taxes are levied and collected.

Bonds may be issued by counties for bridges across border streams of the State, upon a favorable vote of a majority of those voting at an election called thereon.

Provision is made for working convicts on the roads and in preparation of road material, but no convict who objects shall be so worked.

ROAD MILEAGE.

At the close of 1914 Iowa had 104,074 miles of public road, of which 614.57 miles, or 0.59 per cent, were surfaced. Of the surfaced roads 413 miles were gravel, 171.3 miles macadam, 23 miles sand-clay, 5.77 miles concrete, and 1.5 miles shell. According to the reports received in 1909 Iowa had 102,427 miles of road, of which 2,505.1 were reported as surfaced, thus indicating that the mileage of surfaced roads reported for 1909 exceeds the mileage reported for 1914 by 1,890.53. The figures for 1914 were obtained by the Iowa State Highway Department, and it is believed, therefore, that they are much more accurate than those furnished for 1909. Information in regard to road mileage for the year 1914 is presented in Table 13.

REVENUES APPLIED TO ROADS AND BRIDGES.

The total revenue applied to roads and bridges in 1914 amounted to $10,187,507.32, exclusive of road bonds and warrants, of which $3,843,294.94 was derived from a general county and township bridge tax; $4,128,493.90 from a general county and township road tax; $896,248.60 from the township drag tax; $801,258.24 from the motor vehicle tax; $255,821.64 from the poll tax; $188,390, the cash value of the statute labor tax, and $74,000 was appropriated by the State for educational and supervisory work by the State highway commission. Of the latter sum, $50,000 was for engineering and inspection, $10,000 for administration, and $14,000 for miscellaneous equipment, etc. None of these amounts include funds derived from bond issues and road warrants. It was impossible to ascertain the amounts expended from such sources in 1914. In 1904 the total revenue applied to roads and bridges amounted to $3,106,607.50, thus indicating an increase in the 10-year period of $7,080,899.82, or 227.92 per cent.

Detailed information in regard to revenue applied to roads and bridges during 1914 is presented in Table 36.

ROAD AND BRIDGE BONDS.

On January 1, 1915, the total road and bridge bonds outstanding amounted to $1,960,780, of which $376,828 were voted and sold in 1914. These bonds bear interest at the rate of from 4 to 5 per cent. It was impossible to ascertain the amount expended from these sources in 1914. Information as to bond issues is contained in Table 58.

KANSAS.[1]

Kansas has a land area of 81,774 square miles, and a total road mileage of 111,052, of which 1,148.85 miles, or 1.03 per cent, were surfaced at the close of 1914.

The State engineer at the State agricultural college is required to give advice and information on road matters, free of charge, when requested by the county engineer or the board of county commissioners of any county.

The roads of the State are classified as "State roads," which include all roads laid out and defined by the State; "county roads," which include all roads designated as such by the board of county commissioners, and are required, as near as practicable, to connect cities and market centers; "mail routes," which include all free delivery routes; and "township roads," which include all other public highways within the township. The county and State roads are maintained at the expense of the county, and mail routes and township roads, not coinciding with county or State roads, are maintained by the township.

Boards of county commissioners are vested with jurisdiction and general supervision over road and bridge matters in their respective counties. The county board of commissioners of each county is authorized to appoint a county engineer. The county surveyor may be appointed county engineer if the board deems him competent. The county engineer has general supervision of all State and county roads under the authority of the board of county commissioners and of all mail routes and township roads under the direction of the township trustee and highway commissioners.

When 60 per cent of the landowners along any regularly laid out road, who own at least 50 per cent of the land proposed to be taxed, petition the board of county commissioners to improve such road and to assess the cost in not to exceed 10 annual assessments upon the lands lying within the limits stated in the petition, the commissioners cause such improvement to be made and may issue special improvement bonds to pay therefor. If such improvements are made three-fourths of the cost shall be apportioned and assessed against the lands within the limits prescribed in the petition and one-fourth against the township or townships. The board of county commissioners may appoint a superintendent to have charge of such work.

Whenever the board of county commissioners of any county determines that it is necessary to repair or build a bridge or bridges in the county it may appropriate not to exceed $5,000 for each bridge. If the cost of any bridge exceeds $5,000 and the assessed valuation of the county is $15,000,000 or more, additional amounts may be appropriated, graduated according to the assessed valuation.

The board of county commissioners of any county may issue bonds in the county for the building or purchase of a new bridge on petition, signed by not less than 50 voters, requesting the submission of the question to a vote, and the favorable vote of a majority of those voting thereon.

The township trustee, clerk, and treasurer of each township in the State constitute a board of highway commissioners and a township auditing board for their respective townships. All mail routes and township roads are under the supervision and control of the board of highway commissioners, and the board appoints one or more road overseers for all such roads in the township. In order to promote efficiency the board of highway commissioners may employ a superintendent to have charge of all road work under their direction, or may let work to contract.

The board of commissioners of any county may levy for county and State roads and bridges a tax of not more than 1 mill on each dollar of taxable valuation, and, if authorized by a majority vote of those voting at an election thereon, may levy not to exceed 3 mills on each dollar.

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[1] In collecting the information for Kansas assistance was rendered by W. S. Gearheart, State engineer, and A. R. Losh, assistant State engineer, and collaborator of the U. S. Department of Agriculture.

The board of highway commissioners in each township shall recommend to the county board of commissioners each year a levy for highway purposes, which shall not exceed 3 mills on each dollar of taxable property in the township.

All males between 21 and 50 years of age are liable to an annual road poll tax of $3 which may be discharged by the performance of two days' labor on the public roads. The amount of such road poll taxes collected within any city is paid to the city treasurer.

Bonds for bridge purposes may be issued by any county, township, or city in an amount not to exceed, including existing indebtedness, 1 per cent of the taxable property therein, if authorized by a three-fifths vote at an election called thereon.

Authority is given for the working of both State and county convicts on the public highways.

ROAD MILEAGE.

According to reports received, Kansas had at the close of the year 1914, 111,052 miles of public road, of which 1,148.85 miles, or 1.03 per cent, were surfaced. Of the surfaced roads 194.3 miles were macadam, 151.85 miles gravel, 758.5 sand-clay, 30.5 oiled earth, 4.1 brick, 7 shale, 1.35 concrete, and 1.25 cinders. At the close of 1909 Kansas had 98,302 miles of public road, of which 374.71 miles, or .38 per cent were surfaced, thus indicating a gain in surfaced roads of 774.14 miles in the five-year period. Detailed information in regard to road mileage for the year 1914 is presented in Table 14.

REVENUES APPLIED TO ROADS AND BRIDGES.

The total revenue applied to roads and bridges in 1914 amounted to $5,544,048, of which $4,847,055 was derived from the general road and bridge tax, $159,902 from automobile registration fees, $528,011 from poll tax, and $9,080 used by the State agricultural college for educational and advisory work in connection with roads and bridges, this latter fund being a part of the appropriation made by the State for the maintenance of the State agricultural college. In 1904 the total revenue applied to roads and bridges amounted to $1,232,817.45, thus indicating a gain in the 10-year period of $4,311,230.55, or 349.7 per cent. Detailed information in regard to revenue applied to roads and bridges during 1914 is presented in Table 37.

ROAD AND BRIDGE BONDS.

The only bonds issued in the State of Kansas for road and bridge work were in five or six counties where the work was done under the district road law. It was impossible, however, to secure any information as to the districts which had issued bonds and the amounts that had been issued.

MICHIGAN.[1]

Michigan has a land area of 57,480 square miles and a total road milegae of 74,190, of which 7,828.51 miles or 10.55 per cent were surfaced at the close of 1914.

There is a State highway department, which is charged with the duty of giving advice relative to road and bridge construction and maintenance, collecting information and reports from local road officials, and distributing State reward, authorized and appropriated by the legislature for improving the public roads and bridges in the State. The chief officer is the State highway commissioner, who is elected every four years. Whenever any township board, good roads district, or county road commissioner makes application for State reward on any road and requests general plans and specifications, it is the duty of the State highway commissioner to furnish the general plans and specifications requested. When the completed road has been

[1] In collecting the information for Michigan assistance was rendered by Leroy C. Smith, deputy State engineer, and collaborator of the U. S. Department of Agriculture.

passed upon by the State highway commissioner he certifies the fact to the auditor general of the State, who draws a warrant on the State treasurer, payable to the proper authorities in the township, good road district, or county for the amount of State reward due. This varies according to type and width of road, from $250 to $1,000 per mile. No State reward is allowed for more than 4 miles in any one township in any one year, but a township or county may improve additional miles of road in a manner to merit State reward and receive the reward each year until the full amount is paid. The State highway commissioner may refuse to grant further reward to any township, good roads district, or county which does not keep its State-reward roads in proper repair.

A system of State reward trunk-line highways has been designated by the legislature. Double State reward is paid for the improvement of the State reward trunk-line highways. The State highway commissioner may refuse further reward where trunk line rewarded roads are not kept in proper repair.

Under the county road law, which may be adopted by a majority vote of those voting at an election thereon, there is elected in each county a board of not more than three county road commissioners. This board is authorized to make any improvement on any road under its control and to employ a county highway engineer, who is required to make all surveys, plans, specifications, and estimates and exercise general supervision over all construction work. Two or more adjoining counties may employ the same engineer. If State reward is to be applied for, the board of county road commissioners is required to file with the State highway commissioner a map of the county showing the location of the proposed system of county roads, which system may be extended, if approved by the State highway commissioner. All State reward roads composing a part of the county road system must be taken over as county roads by the board of county road commissioners. Before October 1 of each year the board of county road commissioners must have preliminary surveys, general plans, specifications, and estimates of roads, bridges, and culverts made by the county highway engineer. From the estimates the board determines the amount of tax to be raised in the county for such year, specifying all the roads upon which the money is to be expended and the amount to be spent on each road, but such tax may not exceed $3 on each $1,000 valuation where the valuation does not exceed $40,000,000; $2 on the $1,000 where the valuation exceeds $40,000,000 but not $75,000,000; $1 on the $1,000 where the valuation exceeds $75,000,000 but not $100,000,000; and 50 cents on the $1,000 if the valuation exceeds $100,000,000. The board of supervisors levies the tax.

It is made the duty of the board of supervisors to raise a sufficient tax to keep county roads or bridges already built in reasonable repair. Whenever the board of supervisors resolves to issue bonds to raise money for the construction and maintenance of county roads the question may be submitted to an election in which a majority vote is required.

If the owners of a majority of the frontage of lands abutting upon any highway or portion thereof not less than 2 miles in length desire to improve such highway, they may file application to the county road commissioners, who, upon making the improvements, assess from 25 to 75 per cent of the cost on such abutting land according to the benefits accruing, the remainder being assessed to the county and township. All such assessments made in an assessment district may be paid in 10 annual installments and bonds may be issued in anticipation thereof.

By a majority vote at an election for the purpose any combination of townships, villages, or cities lying contiguous in any county may be organized into a good roads district. In each such township, village, or city there shall be elected one good roads commissioner, and these, constituting the board of good road commissioners for the district, have duties in the district like those of the board of county road commissioners in a county under the county road law. The board of good road com-

missioners each year determines the amount of taxes to be levied in the district, which shall not exceed $3 on each $1,000 of assessed valuation. Bonds may be issued upon a majority vote at an election.

All public roads in townships, except county roads, are township roads and are under the care and supervision of the township board and a highway commissioner who is elected in each township. The township may be divided into one or more road districts and a road overseer elected in each district.

Highways in every organized township are laid out, improved and maintained by two money taxes. One is known as the road repair tax and shall not exceed 50 cents on each $100 assessed valuation on all property, outside of incorporated villages, except in townships having an assessed value less than $200,000, in which the tax may not exceed $1 on the $100. The other tax is known as the highway improvement tax and shall not exceed 50 cents on the $100, including incorporated villages, and may be not to exceed $1 on the $100 if the taxable valuation is less than $200,000. A labor tax of not to exceed one day's labor for each $100 assessed valuation may be assessed in townships electing to assess such tax. Such labor tax may be discharged by paying $1.50 for each day assessed.

The township board of any organized township, upon petition signed by not less than 25 freeholders of the township and a favorable majority vote at an election held therefor, may issue bonds in an amount not exceeding 5 per cent of the assessed valuation.

The net fees from the licensing and registration of motor vehicles are applied, 50 per cent to the State highway fund and 50 per cent to the several counties in proportion to the amounts collected therein.

On or before December 1 of each year there is set aside a portion of the appropriation for State highway purposes equal to 2 per cent of the total State rewards that have been paid at that time, which is credited to a repair fund to be paid out after December 1 each year on State-rewarded roads in the same manner as State rewards are paid; but not more than 2 per cent of the total State reward, exclusive of the then current year, paid to any township or county, is paid to such township or county from the repair fund in any one year, provided that all repairs made on such roads shall be in accordance with specifications prepared by or approved by the State highway commissioner.

Authority is given for the working of both State and county convicts on the public highways and in the preparation of road materials.

ROAD MILEAGE.

The total mileage of public roads in Michigan at the close of 1914 amounted to 74,190, of which 7,828.51 miles or 10.55 per cent were surfaced. Of the surfaced roads 1,021.19 miles were macadam, 5,230.25 miles gravel, 1,375.27 miles sand-clay, 107.3 miles concrete, and 94.5 miles bituminous macadam. There were also reported 1,523 miles of graded and drained earth roads. In 1909 there were 86,906 miles of public road, with 6,900.54 miles, or 10.01 per cent, surfaced, an increase of 927.97 miles. Detailed information as to road mileage at the close of 1914 is presented in Table 15.

REVENUES APPLIED TO ROADS AND BRIDGES.

In 1914 there was applied to roads and bridges in the State of Michigan $9,261,998, of which $7,080,177 was received from general county and township taxation; $1,524,557 from local bond funds, and $657,264 from State funds applied to county and township roads under the State reward system. Of the latter sum $590,716 was expended for construction of roads and bridges, $13,035 for maintenance, $36,167 for engineering and inspection, $11,808 for administration, and $5,538 for miscellaneous equipment. In 1904 the total revenue applied to roads and bridges amounted to $3,179,787.88, an increase in the 10-year period of $6,082,210.12 or 191.27 per cent. Detailed information on road and bridge revenue for 1914 is presented in Table 38.

ROAD AND BRIDGE BONDS.

The total road and bridge bonds voted and sold in 1914 amounted to $2,080,742.43. The State highway department estimates that $1,524,557.49 was expended from bond funds by the various counties and townships. It was impossible to ascertain the amount of county and township bonds outstanding at the close of 1914, but according to Bulletin 136 of the United States Department of Agriculture, the total county and township bonds voted to January 1, 1914, amounted to $8,308,287. If to this is added the bonds issued by counties and townships in 1914, and if all of the bonds voted up to January 1, 1914, actually were sold, the total outstanding bonds at the close of the year 1914 amounted to $10,389,029.43. Detailed information as to county and township bonds voted and sold in 1914 and the amounts expended therefrom, also interest rates and terms, is presented in Table 59.

MINNESOTA.[1]

Minnesota has a land area of 80,858 square miles and a total road mileage of 93,517, of which 3,967.83 miles, or 4.24 per cent, were surfaced at the close of 1914.

There is a State highway commission of three members, appointed by the governor. The commission appoints a secretary, who must be a civil engineer and practical road builder, and is known as State engineer. He serves during the pleasure of the commission. A deputy and assistant engineers may be employed. The State engineer and his deputy and assistants are required to give engineering advice and assistance to local road officials, to make all necessary surveys, establish grades, and prepare plans and specifications for all State roads. Any county board, subject to the approval of the State highway commission, may designate as a State road any established road or portion thereof outside the corporate limits of a city, village, or borough, and construct or improve it in accordance with the regulations of the State highway commission.

A State tax of 1 mill is levied annually, the money from which, together with all the money accruing from investments in the internal improvement land fund, and all accruing to any State road and bridge fund, however provided, constitutes a general State road and bridge fund, which is apportioned by the State highway commission to the counties so that no county receives less than 1 or more than 3 per cent thereof. The State road and bridge fund is expended only on State roads. The portion which is paid by the State out of the allotment to any county as State aid in the construction of any road or bridge varies from not less than 80 or more than 90 per cent in counties having an assessed valuation of less than $5,000,000 to not less than 50 or more than 75 per cent in counties having an assessed valuation exceeding $15,000,000. Twenty per cent of the apportionment to any county is used exclusively for the maintenance of State roads and bridges, the State to pay the same proportion of such maintenance cost as it pays for construction or improvement of State roads. Actual maintenance work is done by the board of county commissioners, in accordance with rules and regulations prescribed by the State highway commission.

The county board of commissioners of each county has jurisdiction and control over county road matters. They may constitute and declare any public highway or road in such county outside of an incorporated city or village a county road and direct and supervise its construction and maintenance.

The town board of each town has general care and supervision of all town roads. Each town constitutes a road district and the town board appoints a competent road overseer who, under its supervision, has charge of the construction and maintenance of all town and county roads therein. The town through which any county road passes maintains and keeps it in repair.

[1] In collecting the information for Minnesota assistance was rendered by George W. Cooley, State highway engineer, and collaborator of the U. S. Department of Agriculture.

The county boards in counties in which there may be territory not organized for township purposes may levy a tax of not to exceed 15 mills on each dollar of assessed value of real and personal property in such unorganized territory for road and bridge purposes. Such levy is made in addition to the levy for county road and bridge purposes and is expended under the direction of the county board. The board of each county may levy not to exceed 3 mills on each dollar of taxable property in the county for the construction and maintenance of State and county roads and bridges. The proceeds of such tax levy is placed in a fund known as the "county road and bridge fund." From this the county appropriates to any town in the county such sums as it deems advisable to aid such town in the construction and maintenance of roads.

The council of any village, borough, or city of the fourth class, or the town board of any town may appropriate and expend reasonable sums to assist in the improvement and maintenance of roads lying beyond its boundaries and leading to it. There may be levied in each town a tax of not to exceed 1 mill on each $1 of taxable property therein, outside the corporate limits of any borough, city, or village, for a separate fund to be known as the "dragging fund" and to be used for dragging the roads of the town.

The electors of each town at their annual town meeting determine the amount to be raised by taxation for road and bridge purposes in the town, not exceeding 15 mills on each dollar of taxable property. In case of emergency, after the annual town meeting, the town board may levy a tax of not to exceed 5 mills for road and bridge purposes.

Counties and towns may issue bonds for road and bridge purposes when authorized by a majority of those voting at an election thereon.

State convicts may be used in the preparation of road materials and county convicts may be used in performing labor on the public highways.

ROAD MILEAGE.

At the close of 1914 Minnesota had 93,517 miles of public road, of which 3,967.83 miles, or 4.24 per cent, were surfaced as follows: macadam 120.25 miles, bituminous macadam 19 miles, gravel 2,825.25 miles, sand-clay 985.33 miles, brick 0.5 mile, and concrete 17.5 miles. A total of 15,377.5 miles of graded and drained earth roads was reported for 1914. At the close of 1909 Minnesota had 79,323 miles of public road, of which 5,416.85 miles, or 6.83 per cent were reported as surfaced, indicating a loss in surfaced roads of 1,449.02 miles. This apparent loss probably is due to overestimates of surfaced roads made by the various counties in 1909. The 1914 figures were checked by the State highway department and probably are more accurate than those secured in 1909. Detailed information in regard to road mileage at the close of 1914 is presented in Table 16.

REVENUES APPLIED TO ROADS AND BRIDGES.

The total revenue applied to roads and bridges in 1914 amounted to $6,458,940.07, of which $4,388,254.15 was derived from general county and township taxation; $1,400,000 received from the State by the counties as State aid; $97,100.92 received from various other sources; $143,785 appropriated for the maintenance of the State highway department, and $429,800 expended by counties and townships from local bond funds. The State-aid fund is derived from a 1-mill tax and the amount received from this tax is shown in the last column of Table 39. The total revenue applied to roads and bridges in 1904 amounted to $1,961,629.24, an increase for the 10-year period of $4,497,310.83 or 229.26 per cent. Detailed information showing the revenue applied to roads and bridges in 1914 is presented by counties in Table 39.

ROAD AND BRIDGE BONDS.

The total road and bridge bonds outstanding at the close of 1914 amounted to $1,411,889, of which $62,000 were voted and $358,000 were sold in 1914. Expenditure from bond funds in 1914 amounted to $429,800. There was retired $49,842. Detailed information in regard to road and bridge bonds is presented by counties in Table 60.

MISSOURI.[1]

Missouri has a land area of 68,727 square miles and a total road mileage of 96,041, of which 6,712.57 miles or 6.98 per cent were surfaced at the close of 1914. The roads of the State are classified as follows: class A, intercounty-seat highways, which, when selected and recorded, are known as "State roads;" class B, county public roads, rural route mail roads, or roads that are important laterals to class A roads, and leading to or connecting populous centers; and class C, township roads or roads in the nature of neighborhood roads and not connecting populous centers.

A State highway department exists for the purpose of affording instruction, assistance, and cooperation between the State and counties in the construction, improvement, maintenance, and repair of the public highways. The governor appoints a State highway commissioner for a term of four years. The commissioner, with approval of the governor, appoints one deputy highway commissioner, who is required to be a competent civil or highway engineer. The State highway commissioner, on application of the county court of any county is required to make, or cause to be made, the necessary investigation for the selection and establishment of intercounty highways which become "State roads."

A fund known as "The general State road fund," is created in the State treasury, and all money accruing to the State from any general or special levy of taxes for road purposes, or from any other source whatever, or derived in any way for the construction and improvement of public roads, is credited to such fund, which is apportioned annually to the several counties, districts, and the city of St. Louis, in proportion to the assessed property valuation therein, but no county, district, or city shall receive more than 3 per cent thereof. An equal amount must be raised by such county, district, or city and all expended for the construction or improvement of roads, the plans and specifications for which, if the cost exceed $1,000 per mile of road or $500 for a culvert, must be submitted to the State highway commissioner for his approval.

The county courts are vested with jurisdiction and control of all matters relating to public roads, culverts, or bridges, and expenditures therefor. The county court in all counties, except those under township organization, is required to divide the county into suitable and convenient road districts and appoint a road overseer for each district. The court also appoints a county highway engineer annually who may be the county surveyor. The county highway engineer has direct supervision over the public roads of the county and over the road overseers, and the expenditure of all county or district funds by the road overseer. The office of county highway engineer may be abolished on vote of a majority of those voting at an election called thereon.

The county court of counties not under township organization, and township boards in counties under township organization, may divide the territory of their respective counties or townships into special road districts when petitioned to do so by the owners of a majority of the acres of land within the proposed district and after notice and hearing thereon. A board of three commissioners is elected in each such district to serve for a term of three years. This board may levy a general tax for road and bridge purposes on all property in the district, and may issue road and bridge bonds of the district if authorized by a two-thirds vote at an election thereon, the

[1] In collecting the information for Missouri, assistance was rendered by E. W. Sheets, deputy State highway commissioner, and collaborator of the U. S. Department of Agriculture.

amount of such bonds not to exceed, with existing indebtedness, 5 per cent of the assessed valuation. On petition of the owners of a majority in acres of land within one-half mile of a public road or part thereof in such district, praying for the improvement of such road and the assessment of the cost thereof on all lands in the district, payable in not to exceed 15 installments if a county, and not to exceed 20 if a township, the board of commissioners shall have prepared a map of the district and of the proposed road, with plans, specifications and estimates, and shall submit the same to the State highway commissioner for his approval, after which approval the improvements may be made and the cost assessed on the lands. Special assessment bonds may be issued in anticipation of the payment of the assessments so made on the lands.

In counties under township organization the township board is required annually to divide the township into convenient road districts and appoint a road overseer for each district.

A county license tax on dramshops is assessed in amounts of not less than $250 or more than $400 each six months, the proceeds of which are set aside as a special road fund in such county and divided among the road districts of the county in proportion to the mileage of public roads in each district.

A stamp tax of 25 cents is imposed on each broker's sale of stocks and bonds of any corporation, or of cotton, petroleum, grain, or other commodities, on a margin or otherwise, and all revenues derived therefrom are set apart for road purposes and distributed among the counties in the same proportion as the school funds.

The county court of all counties, except those under township organization, is required to levy an annual road poll tax of from $2 to $6 on each able-bodied male over 21 years and under 50, outside the limits of incorporated cities, towns, or villages, and determine if such tax shall be paid in labor or cash. The court also is required to levy upon all taxable property, real and personal, outside incorporated towns, cities, or villages, a tax of not less than 10 cents nor more than 20 cents on each $100, which is placed to the credit of the road district from which collected. In addition, the county court, in counties not under township organization, may levy not to exceed 25 cents on each $100 valuation, the proceeds to go into a special road and bridge fund of the county or township.

The township board, in counties under township organization, annually assesses a road and bridge tax of not to exceed 25 cents on each $100 assessed property valuation, and credits the proceeds to the district in which collected. The board may levy a poll tax on all able-bodied males over 21 and under 50 years of age residing outside of incorporated cities, towns, or villages, of not less than $3 nor more than $6, which may be worked out or paid in cash at the option of the person assessed.

County courts may issue bonds for and on behalf of the townships of their counties in amounts not exceeding, with existing indebtedness, 5 per cent of the assessed valuation of the township for which issued, if authorized by a two-thirds vote of those voting at an election thereon. Also, on petition of 100 tax-paying citizens of a county, the county court may submit the question of issuing bonds of the county for the permanent improvement of roads, bridges, and culverts therein, and may issue such bonds if authorized by two-thirds of those voting.

The net proceeds from the registration and licensing of motor vehicles is paid into the State road and bridge fund.

Authorization is given for the working of county convicts on roads and in the preparation of road materials.

ROAD MILEAGE.

At the close of 1914 Missouri had, according to reports received, 96,041 miles of public road, of which 6,712.57 miles, or 6.98 per cent, were surfaced. Of the surfaced roads, 3,671.5 miles were gravel, 1,442.25 sand-clay, 1,531.05 macadam, 59 bituminous

macadam, 5 cinders, 2.77 concrete, and 1 brick. Missouri also reported 34,706 miles of graded and drained earth road. In 1909 Missouri reported 107,923 miles of public road, of which 4,755.5 miles, or 4.4 per cent, were surfaced, a gain during the 5-year period of 1,957.07 miles of surfaced road. Detailed information regarding road mileage for 1914 is presented in Table 17.

REVENUES APPLIED TO ROADS AND BRIDGES.

The total revenue applied to roads and bridges in 1914 was $5,513,048.71, of which $3,508,219.39 was derived from the general road and bridge tax; $518,416.46 from dramshops; $23,083.19 from option stamps; $93,783.58 from automobile revenue; $175,101.17 from general State funds; $626,460.27 from special funds, including poll tax, township tax, special taxes, and donations; $505,418.65 cash value of statute labor tax; $55,000 from local bond funds, and $7,566 from State appropriations for the administration of the State highway department.

There are several counties in Missouri under township organization and several in which road work is done by special road districts. An effort was made to secure information as to the amount of revenue applied to roads in such townships and road districts, but with very poor results. The township tax, so far as obtained, is included in the column headed "special funds." It is impossible to estimate the amount of money that was expended for roads and bridges in the townships and road districts from which no reports were obtained. It is obvious, therefore, that Missouri spent more for roads and bridges in 1914 than the above figures indicate.

The total revenue applied to roads and bridges in 1904 amounted to $2,368,972.79, an increase in the 10-year period of $3,144,075.92, or 132.72 per cent.

Detailed information as to revenue applied to roads and bridges in 1914 is presented in Table 40.

ROAD AND BRIDGE BONDS.

The total road and bridge bonds outstanding on January 1, 1915, amounted to $522,500, of which $75,000 was voted and sold in 1914. Expenditures from bond issues in 1914 amounted to $55,000, and there was $37,500 retired. These are principally district and township bonds. No State road and bridge bonds have been issued. Information regarding bond issues is presented in Table 61.

MONTANA.[1]

Montana has a land area of 146,201 square miles and a total road mileage of 39,204, of which 609.25 miles or 1.55 per cent were surfaced at the close of 1914.

There is a State highway commission of three members who are the professor of civil engineering of the Montana State school of agriculture and mechanic arts, ex officio; the State engineer, ex officio; and a civil engineer appointed by the governor and acting as secretary to the commission. The commission and its assistants are charged with the duty of giving such advice and assistance regarding road construction, improvement, maintenance, and supervision throughout the State as time and conditions will permit. It keeps on file a map showing all public roads in each county of the State, and in color all roads and proposed roads which it deems of sufficient public importance to receive State aid, and which, when completed, will provide an adequate system of State roads, leading to or connecting the main market and business centers of the State. The commission, acting with the boards of commissioners of the respective counties, classifies such roads into those of primary and of secondary importance, and, unless otherwise ordered, those of primary importance are constructed or improved first. All roads constructed or improved by the aid of

[1] In collecting the information for Montana assistance was rendered by George R. Metlen, secretary of the State highway commission, and collaborator of the U. S. Department of Agriculture.

the State are thereafter known and designated as State roads, and surveys, plans, specifications, and estimates for all work on such roads in the respective counties are required to be made by the board of county commissioners, in accordance with rules and regulations prescribed by the State highway commission and subject to approval by the commission.

Contracts for work on State roads are let by the board of county commissioners, and the work is done under the direction of that board through a competent engineer employed by it and subject to supervision and approval by the State highway commission. The county commissioners report each year to the State highway commission all expenditures on State and county roads and recommend roads for improvement in the succeeding year. The State highway commission makes a biennial report to the governor.

There is a State highway fund from which is deducted each year the sum deemed necessary for the support of the State highway commission, and the balance is apportioned by the commission among the several counties, taking into account the area of each county, the amount expended on its roads, and the extraordinary expenses incident to developing new territory, but none of the fund is expended in the corporate limits of any city or town or in any county which does not provide an equal amount. The net proceeds from the licensing and registering of motor vehicles are applied to the State highway fund.

Boards of commissioners of the several counties have general supervision over the highways and must keep the county divided into suitable road districts and appoint a competent road supervisor for each district. The board also may employ a competent road builder for the county.

The boards of county commissioners may levy in their respective counties a special tax of not to exceed 2 mills on the dollar of all taxable property therein for the purpose of constructing, maintaining, and repairing free public bridges. The boards also levy annually in each county a general tax of not less than 2 or more than 5 mills on the dollar of all taxable property. In addition a general road poll tax of $2 per annum is levied on each male over 21 years and under 60. All moneys derived from each of the above taxes are credited to the general road fund of the county. Neither of the above taxes applies in an incorporated city or town which levies like taxes for its roads, streets, and alleys.

The county board of commissioners may issue bonds of the county for the construction of highways and bridges in an amount not to exceed, including existing indebtedness, 5 per cent of the value of all taxable property in the county; but no county shall incur indebtedness in excess of $10,000 for any single purpose unless authorized by a majority of the electors voting in an election thereon. Of the forest reserve moneys received by the State from the United States, 66⅔ per cent is apportioned to the counties entitled to share in the apportionment of the fund in proportion to the acreage of forest reserves in each such county. The amount so apportioned is applied to the general road fund of the county.

Provision is made for the working of county prisoners upon the highways.

ROAD MILEAGE.

At the close of 1914, Montana had 39,204 miles of public road, of which 609.25 miles, or 1.55 per cent were surfaced as follows: Macadam, 78 miles, gravel 514.25, sand-clay 14, and shale 3. There were reported also 6,528.05 miles of graded and drained earth road. At the close of 1909 the State had 23,319 miles of road, of which 95 miles were surfaced, a gain for the 5-year period of 514.25 miles. The mileage data for 1914 is shown in Table 18.

REVENUES APPLIED TO ROADS AND BRIDGES.

The total revenue applied to roads in 1914 amounted to $2,888,400.61, exclusive of Phillips County, from which no report was received. Of this amount $1,764,957.88 was received from the general county road and bridge tax, $1,007,452.02 from county funds left over from 1913 and special funds, $102,475 from county bond issues, and $13,515.71 from State motor vehicle fund.

The total revenue applied to roads and bridges in 1904 amounted to $404,097.81, a gain in the 10-year period of $2,484,302.80, or 614.77 per cent. Detailed information regarding road and bridge taxation and revenues for 1914 is given in Table 41.

ROAD AND BRIDGE BONDS.

The total road and bridge bonds outstanding on January 1, 1915, amounted to $2,224,050.72, of which $462,000 were voted in 1914 and $440,000 sold the same year. There was expended from bond funds a total of $102,475 and there was retired $33,000. All bonds issued in 1914 bear from 5 to 5½ per cent interest and run for 20 years. Detailed information on this subject is presented in Table 62.

NEBRASKA.[1]

Nebraska has a land area of 76,808 square miles, a total road mileage of 80,272, of which 1,204.54 miles, or 1.5 per cent, were surfaced at the close of 1914.

There is a State board of irrigation, highways, and drainage, composed of the governor, the attorney general, and the commissioner of public lands and buildings. The board elects a secretary, who must be a civil engineer and is known as the State engineer. The board advises with and aids the county boards in the preparation of plans and estimates and in the supervision of highway work. This is done through an advisory board of three men well versed in road building, together with a secretary who must be a civil engineer and practical road builder and is known as the State highway engineer. These are appointed by the State board, are removable by it, and serve without compensation. Whenever any funds are provided by the State for the construction of roads and bridges, the work is carried on under the direct supervision of the State board of irrigation, highways, and drainage. The advisory board is required to make a biennial report to the governor.

The State board of irrigation is made a State board of supervision for bridges to be located and constructed or purchased under State aid. A tax of one-fifth of 1 mill is levied annually on each dollar of the grand assessment roll of the State for the State-aid bridge fund, to be appropriated by the legislature to aid in the building of bridges across rivers of a width of 175 feet or more, the cost to be paid one-half by the State and one-half by the county. Application for such aid must be made to the State board of irrigation by the county boards. After such bridges are constructed the duty of maintaining them devolves upon the county, unless maintenance cost exceeds $100, in which event the State pays one-half.

Counties under township organization are divided by the county board of commissioners into seven supervisor districts. Each district elects a supervisor, the seven constituting the county board of supervisors, which divides the county into townships. The town clerk, assessor, and justice of the peace constitute the town board in each township. Each supervisor has charge of the expenditure of funds appropriated by the board out of the county treasury for the roads and bridges within his district. Counties under township organization may vote to have township supervisors, in which event one supervisor is elected from each township and the supervisors thus elected constitute the county board of supervisors. Township boards

[1] The information relative to the State of Nebraska was collected, under the direction of this office, by George E. Johnson, State engineer, and collaborator of the U. S. Department of Agriculture.

each year select one of their number as township highway superintendent to have charge of road and bridge work.

Each county not under township organization is divided into from three to five districts, and one commissioner is nominated by each district but is elected by the qualified electors of the entire county. The commissioners so elected constitute the county board of commissioners. This board has general supervision over the roads of the county, with power to establish and maintain them and to see that the laws in relation thereto are carried into effect. The section lines are made public roads. Each county board divides the county into as many road districts as may be necessary. One overseer of highways is elected in each road district. County boards may appoint a county highway commissioner, who must be a practical and experienced road builder, and who, with the county board, shall have exclusive control and supervision of all the public roads in the county. Road overseers in counties where a county highway commissioner is appointed perform their duties under his direction. The county board is required to divide the public roads of each township or precinct into permanent road-dragging districts and appoint a superintendent of dragging in each township or precinct, who shall cause to be dragged all roads the county board may direct.

Able-bodied males under 50 years of age may be called upon to make emergency repairs on roads and bridges or to clear a mail route of snow. Each person so called upon may be required to furnish a team or tools and implements and is paid for his labor.

All road and labor tax is paid in cash. One-half of all money collected as road tax constitutes a county road fund, which is divided equally among the several commissioner districts for the general benefit of the roads therein, and the other half of such road tax and all labor tax collected constitutes a district road fund and is expended under the direction of the road overseer in the district in which it was collected. The same rate of road taxes may be levied in cities and villages as in the several road districts, but one-half of the proceeds of such taxes so levied and collected in cities and villages shall be paid to the city or village from which collected.

In counties under township organization, the township road tax and the county road tax are paid in cash. All moneys paid into the town treasury from the several districts in discharge of road tax and labor tax constitute a town road fund to be used for the benefit of the road districts of the town, but one-half of the money so collected constitutes a district road fund for use under the direction of the town board in the districts from which collected.

The board of county commissioners, or board of supervisors in counties under township organization, may levy not to exceed 1 mill on each dollar of taxable valuation to be known as the special emergency bridge levy. The county's general tax levy for roads shall not exceed 5 mills on the dollar and for the county bridge fund the levy shall not exceed 4 mills on the dollar. A tax is imposed on inheritances and the proceeds in each county applied to the improvement of its roads. The net proceeds from the registration and licensing of motor vehicles are paid into the county treasury and applied to road construction, dragging, and repair work. One-fifth of the whole amount of the forest reserve fund annually paid to the State by the United States Government is apportioned to the road funds of the counties entitled to share in the apportionment of the funds.

On petition of a majority of the resident freeholders of any road district, precinct, or township, the county board shall levy not less than 5 nor more than 25 mills upon each dollar of taxable property therein, the proceeds of which become a part of the road fund of such district, precinct, or township.

Towns are authorized to purchase toll bridges and, if other funds are insufficient to issue bonds to an amount not exceeding 10 per cent of the assessed value of all tax-

able property therein to pay for them. The bond issue must receive the favorable vote of two-thirds of those voting at an election called thereon.

Any county, township, precinct, city, or village, when authorized by three-fifths of those voting at an election thereon, may issue bonds in an amount not exceeding 10 per cent of the taxable value of all property therein for the purpose of building bridges across any boundary river.

Townships, precincts, cities, or villages, respectively, may issue bonds in amounts not to exceed 10 per cent of their taxable valuation for roads and bridges, when authorized by a vote of two-thirds of those voting at an election called thereon.

Provision is made for the improvement of roads in counties of more than 20,000 population on petition to the county boards, signed by the owners of a majority of the frontage of lands abutting on such roads, and for the payment of the cost of such improvement by the issuance of county bonds, the interest and principal of such bonds to be paid by special benefit assessments on lands lying within 2 miles of the road or roads improved.

State prisoners work on the roads, streets, or alleys.

ROAD MILEAGE.

At the close of 1914 Nebraska had 80,272 miles of public road, of which 1,204.54 miles or 1.5 per cent were surfaced. Of the surfaced roads 1,131.1 miles were sand-clay, 39.21 miles macadam, 21 miles gravel, 7.53 miles concrete, 2.4 miles brick, 1.3 miles bituminous macadam, and 2 miles gypsum. There was also reported 27,540.90 miles of graded and drained earth road.

In 1909 Nebraska reported 80,338 miles of public road, of which 248.55, or .31 per cent were surfaced, a gain in surfaced roads in the 10-year period of 955.99 miles.

Detailed information as to road mileage for 1914 is presented in Table 19.

REVENUES APPLIED TO ROADS AND BRIDGES.

The total revenue applied to roads and bridges in 1914 amounted to $1,796,277.69, of which $1,454,680.65 was derived from general county and township taxes, $85,399.77 from poll taxes, $114,724.44 from inheritance taxes and other special taxes, $47,086 from the automobile fund, and $94,386.83 from the State-aid bridge fund. The total revenue applied to roads and bridges in 1904 amounted to $878,547.40, a gain in the 10-year period of $917,730.29, or 104.4 per cent. Information regarding road and bridge revenue and taxation for these purposes is presented by counties in Table 42.

BONDS.

No State bonds have been issued for roads and bridges and so far as can be ascertained, no bonds have been issued for these purposes by counties or townships.

NEVADA.[1]

Nevada has a land area of 109,821 square miles, a total road mileage of 12,182, of which 262 miles or 2.14 per cent were surfaced at the close of 1915.

By a law enacted in 1913, a board of county highway commissioners was created in each county to be composed of the regularly elected board of county commissioners, the county assessor, and the district attorney. The board is vested with exclusive control of all matters pertaining to the construction, repair, and maintenance of public highways, roads, and bridges within the county, and may appoint a county road supervisor, who, under the direction of the board, has charge of all county roads, and supervises and directs construction, repair, and maintenance. If the county board of highway commissioners decides not to appoint a county road supervisor, it

[1] In collecting the information for Nevada assistance was rendered by Parvin P. Jones, collaborator of the U. S. Department of Agriculture.

may appoint a board of from one to three road commissioners for each district to have like duties as those prescribed for the supervisor. The respective boards of county highway commissioners were required by law to lay out and designate, on or before September 1, 1913, the roads in the county which accommodated the greatest amount of travel and were of most importance to the people generally. Such roads were to be designated as main county roads. The board also was required to designate the other roads in the county accommodating general public travel, and these roads were to be designated as general county roads. Where the cost of any work of improvement exceeds $500, it is the duty of the board of county highway commissioners to have plans and specifications prepared therefor, and to let the same to contract to the lowest responsible bidder.

For the purpose of creating a fund to be known as the county road and bridge fund, to be used in the construction, repair, and maintenance of county roads and bridges, and the purchase of necessary machinery and equipment, the county boards of commissioners are authorized to issue bonds of their respective counties in an amount not to exceed 3 per cent of the total assessed value of real and personal property therein, after having submitted the proposition for a majority vote of the qualified electors.

The boards of county commissioners are authorized, on petition of a majority of the taxpayers of any township, or townships, to divide such township or townships into a road district or road districts. Road districts so created shall be disorganized by the board of county commissioners upon petition of a majority of the taxpayers. Road funds for such districts are obtained by applying thereto the net proceeds of the county's proportion of all poll taxes collected from citizens residing within such road district, and also the proceeds of the one-fourth of one per cent county road taxes levied and collected within such district; and, when a majority of the property holders of the district shall petition the county commissioners so to do, an additional special tax may be levied in an amount not to exceed $3 on each $1,000 valuation; provided, that persons liable to such special tax may pay a part or all of it in labor on the roads at the rate of $3 for each full day's work with tools and implements, $4 for each team of two animals and $1 for each additional animal.

The legislature has passed at different times laws designating certain roads to be State highways and imposing upon the respective boards of county commissioners the duty of constructing and maintaining such highways.

A general county road tax of not to exceed one-fourth of one per cent upon the taxable property of the county is authorized to be levied by the board of county commissioners and the proceeds expended in each district in proportion to the amount collected therein. The net proceeds from the registration and licensing of motor vehicles is applied to the maintenance of roads in the several counties, each county being entitled to such proportion of the fund as was collected therein.

Provision is made for the working of both county and State convicts upon the highways. Such detail, however, is voluntary on the part of the convict. An appropriation has been made to create a general road fund from which to pay the expenses incident to the working of State convicts on the roads.

ROAD MILEAGE.

At the close of 1915 Nevada had 12,182 miles of public road, of which 262 miles, or 2.14 per cent, were surfaced. Of the surfaced roads 193 miles were gravel, 67 miles sand-clay, and 2 miles macadam. There were also reported 1,080 miles of graded and drained earth road. In 1909 Nevada reported 12,751 miles of public roads, of which only 46 miles, or 0.36 per cent, were surfaced, a gain in surfaced mileage the 6-year period of 216 miles. Detailed information regarding road mileage in 1914 is presented by counties in Table 20.

REVENUES APPLIED TO ROADS AND BRIDGES.

The total revenue applied to roads and bridges in 1915 amounted to $245,013.65, of which $173,730.86 was derived from the general county taxes, $54,026 from poll taxes, and $17,256.79 from county bond issue. It was impossible to secure this information for the year 1914. No funds were devoted to road improvement by the State during the years 1914 or 1915. In 1904 the revenues applied to roads and bridges amounted to $46,875.85, a gain for the 11-year period of $198,137.80, or 422.68 per cent. Detailed information showing the revenues applied to roads and bridges in 1915 is presented in Table 43.

ROAD AND BRIDGE BONDS.

The total road and bridge bonds outstanding January 1, 1915, amounted to $38,000, of which $25,000 were voted and sold in 1914. In the early part of 1915 there was expended from bond funds $17,256.79. Road bonds amounting to $3,000 were retired in 1914. No State road and bridge bonds have been issued. Detailed information on this subject is presented in Table 63.

NEW MEXICO.[1]

New Mexico has a land area of 122,503 square miles, and a total road mileage of 11,873, of which 261.5 miles or 2.2 per cent were surfaced at the close of 1914.

There is a State highway commission consisting of the governor, the commissioner of public lands, and the State engineer. The governor is chairman, the commissioner of public lands is secretary, and the State engineer is engineer of the commission. The commission has charge of the expenditure of the State road fund, is authorized to employ, remove, and fix the salaries of assistant engineers and other necessary help, is empowered to make rules and regulations governing the method of construction, improvement and maintenance of such highways and bridges as may receive aid from the State and to compel compliance therewith, and, when requested, is required to advise towns, villages, and counties regarding the construction and maintenance of any road or bridge therein. It also is made the duty of the commission to investigate the needs of the various localities of the State and to determine what roads shall be constructed or repaired, and cooperate with the boards of commissioners of the various counties in the construction of such roads. It is further required of the commission that it construct, repair, and maintain at the expense of the State, either wholly or in part, such highways as in its judgment will best subserve the interest of the general public and result in the ultimate development of a complete system of highways in the State.

At various times the legislature has designated specific roads as State highways and provided for their improvement either by cooperation with the counties through which they pass, by an appropriation from the State treasury, or by the labor of State convicts. Where such highways are provided, the counties are required to provide the necessary rights of way; and in the case of the "El Camino Real" the boards of commissioners of the counties through which it passes are authorized and required to levy a special tax of not to exceed 2 mills on the dollar on all taxable property in their respective counties to be used for the construction of bridges within such counties.

There is in each county a county road board composed of three qualified electors and taxpayers, appointed by the State highway commission for a period of three years. The members serve without compensation and are subject to removal by the State highway commission. The county road board has authority to construct or improve, or to aid in constructing or improving, any road or bridge within the county and to maintain and repair the same, and is required to select and lay out, in cooperation

[1] In collecting the information for New Mexico assistance was rendered by James A. French, State engineer, and collaborator of the U. S. Department of Agriculture.

with the State highway commission a system of prospective county highways to include the main traveled roads of the county, together with those leading to the county seat and to such other towns, settlements, and railroad stations as may be deemed advisable. Each such board is directed to employ a surveyor to prepare, in accordance with instructions of the State highway commission, a map showing the system of prospective county highways which must meet at the county lines so as to make continuous and direct lines of travel between the counties.

A State tax of 1 mill is levied each year and the proceeds are paid into the State treasury to the credit of the State road fund. Also, one-half of the net proceeds from licensing and registering motor vehicles is applied to the State road fund. In addition a State tax of one-fourth mill is authorized to be levied and the proceeds used in carrying out the provisions of the acts providing for constructing the highway known as the "El Camino Real."

The board of county commissioners of each county is authorized to levy a general road tax of not to exceed 3 mills on each dollar of assessed valuation.

At the general election in 1912, a State bond issue of $500,000 was authorized, to be sold as needed by the State highway commission for the construction of the State system of highways.

All able-bodied males between 21 and 60 years of age are required to pay an annual road tax of $3, or in lieu thereof to work three days on the roads.

On petition of 100 legal voters and taxpayers, the board of county commissioners may levy a special tax of not to exceed 1½ mills for the purpose of creating a county road fund. Also, one-half of the net proceeds from licensing and registering motor vehicles is apportioned to the several counties in proportion to the amounts collected in each, and applied to the county road fund.

On petition for the building of a public bridge signed by taxpayers to the number of 400 in class A counties, 200 in class B counties, and 100 in class C counties, the county board of commissioners may levy to pay therefor taxes limited in amounts, according to the classification of the several counties, as follows: $25,000 in class A counties, $10,000 in class B counties, and $3,500 in class C counties.

Bonds for road and bridge purposes may be issued by the board of county commissioners of any county in an amount not to exceed 4 per cent of the assessed value of all property therein, if authorized by a majority vote at an election thereon.

ROAD MILEAGE.

At the close of 1914 New Mexico had, according to the reports received, 11,873 miles of public road, of which 261.5 miles, or 2.2 per cent, were surfaced. Of the surfaced roads 184 miles were gravel, 72.5 miles sand-clay, and 5 miles bituminous macadam. There also was reported 1,906.5 miles of graded and drained earth road. At the close of 1909 New Mexico had 16,920 miles of public road, of which 104 miles, or 0.61 per cent, were surfaced, an increase of 157.5 miles of surfaced roads. Detailed information as to road mileage in each county at the close of 1914 is presented in Table 21.

REVENUES APPLIED TO ROADS AND BRIDGES.

In 1914 there was applied to roads and bridges a total of $556,398.82, of which $357,955.15 was derived from the general State and county road and bridge tax; $16,871.69 from the forest reserve fund; $63,320.46 from special bridge levies; $42,280.64 from a $3 personal tax; $29,970.88 from county levies for special roads; $30,000 from bond issue funds in Dona Ana County; and $16,000 from automobile licenses, expended by the State. The forest reserve fund is applied to roads and schools, but it was impossible to ascertain how much of the amount given above was expended for schools. The total revenue applied to roads and bridges in 1904 amounted to $165,651.56, an increase in the 10-year period of $390,747.26, or 235.88 per cent. Information as to revenue applied to roads during 1914 is presented by counties in Table 44.

ROAD AND BRIDGE BONDS.

The total road and bridge bonds outstanding on January 1, 1915, amounted to $157,000, of which $50,000 was voted and sold in 1914. There was expended in 1914 in Dona Ana County $30,000. In 1913 the State authorized the issuance of $500,000 State bonds for road and bridge purposes, but the funds derived from this issue did not become available until September 1, 1915. These bonds are issued in denominations of $1,000 each, numbered from 1 to 500, the first 20 of which are payable on January 1, 1915, and 20 bonds in consecutive order on July 1, annually, thereafter. The proceeds are to be expended for the construction and maintenance of a system of State highways.

Detailed information on this subject is presented in Table 64.

NORTH DAKOTA.[1]

North Dakota has a land area of 70,183 square miles and a total road mileage of 68,796, of which 955 miles, or 1.38 per cent, were surfaced at the close of 1914.

There is a State highway commission composed of the governor, the State engineer, and one other member appointed by the governor. The State engineer, as secretary, is required to keep all records of the commission, to give such advice, assistance, and supervision in respect to road construction as time and conditions will permit, and to prepare plans and specifications for and superintend the construction of any road, under the direction of the State highway commission, when requested so to do by the board having jurisdiction over such road. The State highway commission requires the State engineer to prepare a map of each county showing the roads and the location of all bridges and culverts, and also the roads on which it is proposed to utilize State funds when such funds may be made available. When requested by any board of county commissioners, or by any board of township supervisors, the State engineer is required to prepare plans for the construction of any bridge or culvert or to examine and report on any existing bridge or culvert, and cooperate as far as possible with the county surveyor or county superintendent of highways.

The construction and maintenance of roads and bridges in the several counties is vested in the county board of commissioners. Such jurisdiction in civil townships is vested in the township board of supervisors. The board of county commissioners in any county not formed into townships is required to apportion the county annually into one or more road districts and appoint a road supervisor for each district. The boards of county commissioners of the several counties may appoint biennially a competent engineer or practical road builder, who may be the county surveyor, to be county superintendent of highways, and to have charge of the road work within the county.

By an act passed in 1915 there is in each county a board of highway improvements, consisting of one member from each road district in the county. It is the duty of this board to formulate plans and methods for the uniform working of highways within the county, and such method as it may adopt shall be followed in each district of the county.

The township board of supervisors is required to appoint annually one township overseer of highways, who must be a practical road builder. He has charge of the construction and maintenance of all highways and township bridges in the township. In unorganized territory in counties where no county superintendent of highways has been appointed, the board of county commissioners shall appoint a district overseer of highways, whose powers and duties shall be the same as in the organized townships.

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[1] In collecting the information for North Dakota assistance was rendered by Jay W. Bliss, State engineer, and collaborator of the U. S. Department of Agriculture.

A tax not to exceed 5 mills on the dollar for road purposes and 4 mills on the dollar for bridge purposes may be levied in each county. A road poll tax of $1.50, or one day's labor, upon all male persons between 21 and 50 years of age not exempt by law also may be levied.

In each county having a population of 2,000 or more, according to the latest Federal census, there shall be levied and collected a tax of not less than one-fourth mill or more than 4 mills on the dollar, the proceeds to go into a county road fund, to be used only for grading, ditching and surfacing the principal thoroughfares of the county.

Township supervisors may levy for road and bridge purposes a tax of not to exceed $1 on each $100 of assessed valuation.

The net proceeds from licensing and registering motor vehicles are returned to the counties from which collected for the purpose of maintaining the main-traveled roads.

Authority is given for working State convicts upon the public highways.

ROAD MILEAGE.

At the close of 1914 North Dakota had, according to the reports received, a total of 68,796 miles of public road, of which 955 miles or 1.38 per cent were surfaced with gravel. There was also reported 25,306 miles of graded and drained earth roads. At the close of 1909 North Dakota had 61,593 miles of public road, of which 140 miles or 0.23 per cent were surfaced; a gain of 815 miles of surfaced road in the 5-year period. Information showing mileage of roads at the close of 1914 is presented in Table 22.

REVENUES APPLIED TO ROADS AND BRIDGES.

The total revenue applied to roads and bridges in 1914 amounted to $2,402,383.52, of which $2,016,419.64 was received from the general county and township tax; $44,900.60 from automobile licenses; $84,092.95 from poll taxes paid in cash; $214,283.58 from special road and bridge funds and other sources, and $42,686.75 which represented the cash value of the property poll tax worked out upon the public roads. The total revenue applied to roads in 1904 amounted to $550,340.72, a gain in the 10-year period of $1,852,042.80 or 436.52 per cent. Information showing the revenues applied to roads and bridges during the year 1914 is presented in Table 45.

No road and bridge bonds have been issued by the State, counties or townships in North Dakota.

OHIO.

Ohio has a land area of 40,740 square miles, a total road mileage of 86,354, of which 30,569.17 miles or 35.16 per cent were surfaced at the close of 1914.

The governor appoints a State highway commissioner for four years unless sooner removed by the governor. The State highway commissioner appoints three deputy commissioners, each of whom must be a competent civil engineer. One is designated chief highway engineer. One of the deputy commissioners has supervision of all road construction work, another of all road maintenance and repair work and the third of all bridge and culvert construction, maintenance, and repair work. Necessary division engineers may be appointed by the State highway commissioner. The State highway commissioner is vested with general supervision of the construction, improvement, maintenance, and repair of all intercounty highways and main market roads, and the bridges and culverts. Upon the request of county or township road officials, he gives engineering advice and assistance and causes surveys, plans, specifications, and estimates to be prepared for the construction, maintenance and repair of roads, bridges or culverts.

The State highway commissioner was required by the legislature to designate and report to the governor a system of intercounty highways; and the legislature has designated a system of main market roads, which follow along and upon the route

or portions of the system of intercounty highways. The State highway commissioner may designate additional intercounty highways and main market roads, or change existing ones.

A State tax of three-tenths of 1 mill on all taxable property in the State is levied annually, and the proceeds constitute a State highway improvement fund. Of this fund 75 per cent is used for the maintenance of the State highway department and for apportionment equally among the several counties to aid in the construction, maintenance and repair of the intercounty highways, and 25 per cent is used to aid in the construction, maintenance and repair of the main market roads. The county commissioners are required to make application to the State highway commissioner for State aid before January 1 of the year for which the funds are available and if they do not make application by such date the township trustees may do so. The county or township, and the State each pay one-half of the cost of improvements made with the aid of State funds unless the county or township agrees to pay a larger portion; and of the county's portion the county pays, except as otherwise provided, 50 per cent, the township 30 per cent, and abutting property 20 per cent.

The county commissioners of the several counties are vested with general jurisdiction over the roads in their respective counties. Applications to locate, alter, vacate, or otherwise affecting a public road, are made by petition to the county commissioners. The county surveyor is made the county highway superintendent, who may be designated by the State highway commissioner to have charge of the highways, bridges and culverts in the county under the control of the State, in which event one-fifth of his salary is paid by the State. If the State highway commissioner deems the county highway superintendent of any county improperly qualified and so states in writing to the county commissioners, he may then designate an engineer to have charge of the construction, improvement and repair of all bridges and highways within such county. On or before April 1 each year, the county highway superintendent reports to the county commissioners an estimate of the probable amount required within the year for the construction, maintenance and repair of bridges, culverts and roads, and also makes an annual estimate to the township trustees of the funds needed for the construction, maintenance and repair of bridges, culverts, and roads in the township.

The board of county commissioners of any county may construct a new road or improve any existing road when requested by a petition signed by at least 51 per cent of the land or lot owners, residents of the county, who will be specially taxed or assessed for such improvements. Of the cost of such improvements, a part or all may be assessed against abutting real estate and the balance, if any, shall be paid by the county and township, or townships, as determined by the board of county commissioners. In order to meet the county's portion of the cost, the county commissioners are authorized to levy a tax of not exceeding 2 mills on the dollar of taxable property in the county; and in order to provide funds with which to meet the township's portion the county commissioners may levy a tax of not exceeding 3 mills on the taxable property of such township or townships. Bonds of the county may be issued in anticipation of the collection of such taxes and assessments.

Toll roads may be purchased by the boards of county commissioners in their respective counties, when authorized by a majority of those voting at an election thereon. Bonds may be issued for toll roads so purchased.

Three township trustees are elected biennially in each township, which is divided into not less than one or more than four road districts, and the trustees appoint for each road district a superintendent, who is known as township highway superintendent and has control of the roads of his district. The township highway superintendent is under the control and direction of the township trustees and may be removed for incompetence or neglect of duty. He divides the gravel and unimproved public roads into road dragging districts of not more than 6 miles of road each, and contracts for dragging.

The public highways of the State are divided into three classes, State roads, county roads, and township roads. State roads include intercounty highways and main market roads improved or taken over by the State, and are maintained by the State highway department. County roads are such as are improved, or that may hereafter be improved, by the county, or heretofore built by the State and not a part of the system of intercounty highways and main market roads, together with such roads as are, or may be constructed by the township trustees to conform to the standard for county roads as fixed by the county commissioners, and all such roads are maintained by the county commissioners. Township roads include all other public highways, and are maintained by the township trustees, but the county commissioners may assist in maintaining such roads.

To provide funds to enable counties and townships to pay their portion of the cost of roads built with State aid, the county boards of commissioners may levy a tax of not to exceed 1 mill on all taxable property in the county and township trustees may levy not to exceed 2 mills on all taxable property in the township. The county commissioners may issue bonds of the county in anticipation of the taxes which may be levied, the amount not to exceed the sum of the county, township and land assessment portions of the cost of State-aid highways.

After the annual estimate for the county has been filed with the county commissioners by the county highway superintendent, as required by law, the county commissioners, after having made such changes or modifications as they deem desirable, may levy for the purposes set forth in the estimate a tax of not to exceed 2 mills upon each dollar of taxable property in the county; and after the annual estimate for each township has been filed with the trustees of the township, they may levy a tax of not to exceed 2 mills upon each dollar of taxable property in the township outside the limits of incorporated villages or cities.

The trustees of any township may levy and assess upon each dollar of taxable property therein a tax of not exceeding 3 mills for the purpose of improving, dragging repairing, or maintaining any public road, or roads, or parts thereof. The trustees designate the roads within the township to be improved, and direct the county highway superintendent to make necessary surveys, plans, specifications, and estimates. If the funds raised by the levy be insufficient, the trustees may issue bonds of the township if authorized by a favorable vote of a majority of the qualified electors of the township who participated in the last preceding election for governor. The trustees may assess all or any part of the cost of making such improvement against the land not more than 1 mile from either side or terminus of the road or roads improved.

The owners of real estate in any township may petition the township trustees for the construction, reconstruction, or improvement of any public road, or part thereof, in such township, and for the assessment, according to the benefits, of from 25 to 50 per cent of the cost thereof on the real estate within 1 mile, or within one-half mile, on either side or terminus of such road or part thereof.

The funds derived from the registration and licensing of motor vehicles is applied to the maintenance and repair of the intercounty highways and the main market roads of the State.

Authority is granted for the working of State prisoners on the intercounty highways and main market roads. They may be worked also on the county roads, and county and municipal convicts may be worked upon the public roads and streets.

ROAD MILEAGE.

At the close of 1914 Ohio had 86,354 miles of public road, of which 30,569.17 miles or 35.16 per cent were surfaced. Of the surfaced roads 12,903.87 miles were macadam, 1,066.29 bituminous macadam, 15,385.93 gravel, 640.41 brick, 315.67 concrete, 211 sand-clay, and 46 miscellaneous. In addition, there were reported 15,280 miles of graded and drained earth roads. At the close of 1909 Ohio had, according to reports

received, 88,861 miles of public road, of which 24,106 miles or 27.13 per cent were surfaced, an increase in surfaced road mileage in the five-year period of 6,463.17 miles. Detailed information on this subject is presented in Table 23.

REVENUES APPLIED TO ROADS AND BRIDGES.

The total revenue applied to roads and bridges in 1914 amounted to $14,334,245.98, of which $5,266,081.98 was derived from the general county and township tax; $796,476.72 from the State-aid fund disbursed to counties; $1,072,413.95 expended by State highway department in addition to disbursements to counties; $6,384,355.74 expended from county and township bond issues; and $814,917.59 from other sources. The total revenue applied to roads and bridges in 1904 amounted to $5,706,083.61, an increase in the 10-year period of $8,628,162.37, or 151.2 per cent. Detailed information on this subject is presented in Table 46.

ROAD AND BRIDGE BONDS.

The total road and bridge bonds outstanding in 1914 amounted to $31,175,968.53. These were county and township bonds. There was expended from county and township bonds in 1914, $6,384,355.74; there was retired $2,684,593.81. In the same year $8,702,303.46 was voted and $8,593,303.46 sold. Detailed information on this subject is presented in Table 65.

OREGON.[1]

Oregon has a land area of 95,607 square miles and a total road mileage of 36,819, of which 4,726.4 miles, or 12.81 per cent, were surfaced at the close of 1914.

There is a State highway commission composed of the governor, as chairman, the secretary of state and the State treasurer. Until 1915 the commission appointed a State highway engineer. In that year the legislature abolished that office, creating the elective one of State engineer, who supervises and directs all State road work, advises and assists the county courts when so requested in all road and bridge matters, and selects trunk or State roads leading to the chief market centers, and so far as possible connecting with the principal county roads of the State, to be submitted to the State highway commission as a suggested system to be improved at State expense. The State highway commission appoints a chief deputy to the State engineer, to have immediate charge of highway work. A State tax of one-fourth of a mill is levied on all property in the State and the proceeds constitute the State road fund, which is expended under the direction of the State highway commission.

The county court has jurisdiction over all county road matters, divides the county into suitable and convenient road districts annually, and appoints a road supervisor for each. The county surveyor, who is elected, surveys and lays out roads under the direction of the county court. A board of viewers recommends action on such roads to the court. A county road master, who has general supervision of all road matters under the direction of the county court, may be appointed each year by the court.

A tax of not to exceed 10 mills on the dollar on all taxable property in the county, the proceeds of which shall be set aside as a general road fund to be used in the improvement and construction of county roads or bridges on county roads, may be levied by the county court. Seventy-five per cent of the funds thus derived are apportioned to the several road districts in the county in proportion to the taxable valuation of each district. The resident taxpayers of any road district in a county may vote an additional tax for road purposes. District road meetings legally called have power to determine what, if any, county roads or portions thereof in the road district are to be improved in any special manner and to levy a special tax of not to exceed 10 mills on the dollar on all taxable property in the district to pay for them. Improvements so made are under the control of the county court.

[1] In collecting the information for Oregon, assistance was rendered by G. Ed Ross, collaborator of the U. S. Department of Agriculture.

Bonds may be issued by any county for road construction when authorized by the favorable vote of a majority of those voting at an election thereon. Such bonds are limited in amount not to exceed 2 per cent of the assessed valuation of the county.

The net proceeds from the licensing and registration of motor vehicles is returned to the several counties in proportion to the amount collected in each county and applied to road purposes.

Both State and county convicts may be used on the public roads.

ROAD MILEAGE.

At the close of 1914 Oregon had a total of 36,819 miles of public roads, of which 4,716.40 miles, or 12.81 per cent, were surfaced. Of the surfaced roads 1,000.72 miles were macadam, 137.25 miles bituminous macadam, 3,060.15 miles gravel, 179.50 plank, 300 sand-clay, 28.41 concrete, 10 volcanic cinders, and 0.37 wood block. There were also reported 4,718.75 miles of graded and drained earth road. The total of all public roads in 1909 was 29,475 miles, of which 2,799.25 miles, or 9.49 per cent, were surfaced, an increase in surfaced mileage in the five-year period of 1,917. 85 miles. Detailed information regarding road mileage for 1914 is presented by counties in Table 24.

REVENUES APPLIED TO ROADS AND BRIDGES.

The total revenue applied to roads and bridges in 1914 amounted to $5,310,466.76. Of this $3,259,245.59 was derived from the general county tax, $679,832.92 from other sources, $1,122,817.65 was expended from county bond issue funds, $238,570.60 was obtained from the State road tax, and $10,000 was appropriated by the State for salary, office and field expenses of the State engineer. Of the amount obtained from other sources $59,761.18 was derived from motor license fees and applied to county roads. The total revenue applied to roads and bridges in 1904 amounted to $796,375.97, an increase for the 10-year period of $4,514,090. 79, or 566.84 per cent. Detailed information on this subject is presented by counties in Table 47.

ROAD AND BRIDGE BONDS.

The total county road and bridge bonds outstanding January 1, 1915, amounted to $1,615,000, of which $1,122,817.65 was expended in 1914. In the same year $1,365,000 was voted and sold. No State road bonds have been issued. Information regarding road and bridge bonds is presented by counties in Table 66.

SOUTH DAKOTA.[1]

South Dakota has a land area of 76,868 aquare miles, and a total road mileage of 96,306, of which 363 miles, or 0.37 per cent, were surfaced at the close of 1914.

There is a State highway commission composed of three members, one from each congressional district, appointed by the governor. The work of the commission is of an advisory nature. Any county board may designate any established road or specified portion in its county as a State road, subject to the approval of the commission, and may construct or improve it in accordance with the regulations of the commission.

Each organized county of the State has a board of county commissioners. In counties not formed into townships, the board of county commissioners is required to divide the county annually into one or more road districts and appoint a road supervisor for each district. Each road supervisor has charge of highway and bridge work in his district, subject to the supervision and direction of the county commissioners.

Every road located by State or county authorities is a county road. The county commissioners have general supervision of county roads and have power to appro-

[1] In collecting the information for South Dakota, assistance was rendered by Homer M. Derr, State engineer, and collaborator of the U. S. Department of Agriculture.

priate such sums from the county treasury as they think advisable for improving them; but these appropriations shall not be greater in any one year than the ratio of $1,000 to each $500,000 of assessed valuation of real estate in the county. Additional sums may be appropriated to assist in building bridges and for opening and repairing county roads when authorized by the people. The towns through which any county road passes are required to keep the road in repair.

In counties having township organization one supervisor is elected each year at the annual town meeting. The supervisors constitute the board of supervisors and have charge of the roads and bridges in the townships. They divide their respective townships into as many road districts as they may deem convenient and appoint a road overseer for each district.

On petition of 5 per cent of the resident freeholders of any township, the question of abolishing the highway labor tax and the requirements relating thereto may be submitted to a vote. A majority of those voting shall determine such election. If the highway labor tax is abolished, all road taxes, poll and property, must be paid in cash. A township may, by like proceedings, return to the labor system.

All road taxes collected as personal taxes from residents of any incorporated city or town, and all road taxes collected on real or personal property in such city or town, shall be paid to the treasurer and be used in improving its streets or bridges, or roads leading thereto.

Whenever one-third of the resident taxpayers of any county petition the board of county commissioners for an appropriation to build a bridge across any navigable river on the line of said county, the board publishes a notice and holds a hearing. It may thereupon appropriate not to exceed one-half of the cost of the bridge.

The proceeds derived from the national forests in the State are apportioned to the counties in which national forests are located in proportion to the area of the forests in each county, and 50 per cent of the amount so apportioned is applied to road purposes.

The county board of commissioners may submit to a general or special election the question of raising a sum greater in amount than can be raised by the annual tax levy authorized for constructing any road or bridge. A favorable vote of a majority of the voters of the county is required to authorize such levy, which shall not exceed 1 mill on the dollar of assessed valuation.

The county commissioners annually levy, in addition to the road taxes levied by the several townships, a road tax of not to exceed 5 mills on the dollar, and, if authorized by a majority of the electors of the county, such levy may be not to exceed10 mills; but in 1915 a law was passed changing the levy not to exceed 2 mills, and not to exceed 5 mills when authorized by a majority of the electors of the county. The county commissioners may levy in unorganized townships in their respective counties not to exceed 8 mills on each dollar of assessed valuation, the proceeds to be expended within the unorganized district.

Upon petition of two-thirds of the residents of a county owning two-thirds of the acreage abutting on any earth road, the county commissioners may improve the road by macadamizing, oiling, or graveling. The cost is assessed on the abutting lands to the extent of the benefits accruing to such lands, and the balance of the cost is paid by the county. Where such work is done, the county commissioners are authorized to employ the county surveyor or a competent engineer to do the necessary surveying and prepare plans, specifications, and estimates.

The county commissioners levy yearly for county roads not exceeding 2 mills on the dollar on all property, not including that within the limits of any organized township or of any organized city or town. For county bridges the levy does not exceed 1½ mills, except that in counties where only part of the county is organized into civil townships the levy shall not be greater than 1¼ mills in the organized townships. Also, in all counties not wholly organized into civil townships, the county commis-

sioners shall levy on each male between 21 and 50 years of age not exempt by law a road poll tax of $1.50, which may be paid in cash or by one day's labor.

Of the fees received for licensing and registering motor vehicles 85 per cent are placed in the county motor-vehicle fund to be expended for highway and culvert purposes outside the limits of cities and towns.

The electors of each township, at the annual March town meeting, vote to raise such sums for constructing bridges and for highway labor and road taxes as they may deem expedient and the township supervisors must levy the taxes so authorized; but such road tax shall not exceed 50 cents on each $100 of assessed valuation. There may be assessed annually against each male, not exempt by law, between 21 and 50 years of age a road poll tax of $1.50 or one day's labor. Any road tax levied by the board of county commissioners in addition to the poll tax may be worked out at $1.50 a day in the road district in which the person assessed resides, if a personal tax or a tax on personal property, and in the road district where the real property is situated if a tax on real property. Township taxes, poll and property, are payable in cash, unless a majority of the electors at a town meeting vote that such taxes may be paid in labor.

When a petition is presented to the board of supervisors of any organized town, signed by two-thirds of the legal voters thereof, praying for a certain amount of money to be raised for the construction of any road or roads, ditch or ditches, or similar work, the supervisors issue and sell bonds for the amount specified, but not in excess of 5 per cent of the taxable valuation of the town nor in any case more than $5,000.

Provision is made for working county convicts on the public roads.

ROAD MILEAGE.

At the close of 1914 South Dakota had, according to the reports received, 96,306 miles of public road, of which 363 miles, or 0.37 per cent, were surfaced. Of the surfaced roads 212 miles were gravel, 129 sand-clay, 10 bituminous macadam, and 12 surfaced with other materials. There were reported also 17,071.5 miles of graded and drained earth road.

In 1909 South Dakota reported 56,354 miles of public road, of which 286 miles, or 0.5 per cent, were surfaced, a gain in surfaced roads of 77 miles. Information regarding road mileage is presented by counties in Table 25.

REVENUES APPLIED TO ROADS AND BRIDGES.

The total revenue from all sources applied to roads and bridges in 1914 by the various counties and townships in South Dakota amounted to $1,217,809.42. This does not include Clark, Edmunds, and Haakon Counties, from which it was impossible to obtain information. The total revenue applied to roads and bridges in 1904 amounted to $383,283.07, a gain for the 10-year period of $834,526.35, or 217.73 per cent. Information in regard to revenue applied to roads and bridges in the year 1914 is presented by counties in Table 48.

No State, county or township road and bridge bonds are outstanding at present in South Dakota.

UTAH.[1]

Utah has a land area of 82,184 square miles and a total road mileage of 8,810, of which 1,153.75, or 13.09 per cent, were surfaced at the close of 1914.

The State road commission consists of the governor, the State engineer, the State treasurer, one member of the faculty of the agricultural college of Utah and one member of the faculty of the University of Utah, all serving without compensation. The State road commission designates a system of State roads, has charge of the expenditures of the State road fund, aids the boards of county commissioners by furnishing

[1] In collecting the information for Utah, assistance was rendered by E. R. Morgan, State road engineer, and collaborator of the U. S. Department of Agriculture.

plans, specifications and estimates for culverts and bridges, and road construction work, tests road materials, conducts experiments, keeps all records, maps, profiles, and papers, and submits a biennial report to the governor.

On or before June 1 each year the State road commission gives notice to the county board of commissioners of any county of its intention to engage in State road construction work in that county. Within 30 days the county commissioners notify the commission whether or not they will comply with the requirements of the notice. Should they fail to comply with the requirements in the time specified, with further time of 30 days, the county forfeits its right to its portion of the State road fund for that year. The State road commission makes all plans, specifications and estimates for the improvement of any State road, and may have such work done by contract. County commissioners are required to secure the right of way for any State road located within their respective counties.

The legislature makes an annual appropriation for the State road fund, which is made available by law for the construction and maintenance of State roads in each county in equal proportions, the counties being required to duplicate from one-fourth to the full amount of their apportionment, depending upon the class of the county. The net revenues derived from the registration and licensing of motor vehicles is also applied to the State road fund. The county board of commissioners of each county is authorized to appropriate funds or to levy a special road tax on all assessable property in the county sufficient to duplicate its apportionment of the State road fund, and in like manner to raise additional funds for the purpose of expediting the construction and maintenance of the State roads therein, such additional funds to be expended under the direction of the State road commission; but the total levy that may thus be made in any county shall not exceed 5 mills in any one year.

The board of county commissioners has power to lay out, maintain, control, erect and manage the public roads and bridges within the county, outside of incorporated cities. The board enacts all laws, ordinances, and regulations not in conflict with the law of the State, for the control, construction, alteration, repair and use of all such public roads and highways; grants licenses and franchises for constructing and keeping in repair roads, bridges and ferries, and for the taking of tolls thereon.

The county commissioners are authorized to appoint biennially a county road commissioner, who has charge of the public roads of the county, submits to the board of county commissioners plans, specifications, and estimates for the improvement of county roads within the county and has charge of the execution of such work, and assists in supervising and constructing State roads under the direction of the State road commission. He also is required to keep free from obstructions and in good repair all public roads in the county and to collect the road poll tax.

In 1909 a law was passed to establish a standard system of construction of public highways. Under it there was adopted and designed a profile of cross sections for 4-rod, 5-rod, 6-rod, 7-rod and 8-rod highways to be observed and conformed to in all work upon public roads in the State. Where physical conditions would not permit such construction, the State engineer was required to prepare plans and specifications to meet the conditions.

The county board of commissioners may divide the county into special road districts for the purpose of graveling, macadamizing or paving any State or county road. The cost of such work is assessed at so much per acre, or fraction thereof, upon the lots and lands abutting upon the roads improved, but the assessment shall not be made until notice shall have been given, and, if desired, opportunity for hearing granted.

A road poll tax of $2 is assessed annually upon each man over 21 and under 50 years of age, not physically incapacitated or exempt by law. The funds thus derived are expended by the county board of commissioners in the improvement of the roads of the county. The road poll tax may be collected in incorporated cities or towns and expended on their roads and streets.

The county board of commissioners of each county is authorized to levy taxes upon the taxable property of the county for all county purposes within the limitations prescribed by statute, and upon the taxable property within any district for the construction of roads and highways and for other purposes, but no such district tax shall be levied except upon a favorable vote at an election in which a majority of the qualified electors of the district who paid a property tax the next preceding year vote.

Where the streets of any city are or may become a part of the system of State roads, such city may levy a special tax of not to exceed 2 mills, to be expended in connection with the State road fund under the direction of the State road commission.

County boards of commissioners may contract bonded indebtedness after submitting the proposition at a general or special election. Four weeks' notice of such election must be given, and the favorable vote of a majority of those voting is required. No county, however, shall become indebted in an amount, including existing indebtedness, exceeding 2 per cent of the value of the taxable property therein.

Prisoners in the county jail may be required to work on the county roads, and convicts in the State prison may be required to work on State roads.

ROAD MILEAGE.

According to the reports received, Utah had at the close of 1914 a total of 8,810 miles of public road, of which 1,153.75 miles, or 13.09 per cent, were surfaced. Of the surfaced roads, 685.75 miles were gravel, 401 miles sand-clay, 49 miles macadam, 15.5 miles bituminous macadam, and 2.5 miles concrete. Reports also showed 2,403.11 miles of graded and drained earth roads. In 1909 Utah had 8,320 miles of road, of which 1,018 miles, or 12.23 per cent, were reported as surfaced, an increase in surfaced mileage in the five-year period of 135.75 miles. Detailed information regarding road mileage in 1914 is given in Table 26.

REVENUES APPLIED TO ROADS AND BRIDGES.

The revenue applied to roads and bridges in 1914 amounted to $803,070.63, of which $263,561.23 was derived from the general county tax, $374,878.13 from general county funds, poll taxes, and other sources, $157,732 from State appropriations, and $6,899.27 from county bond-issue funds. This does not include the revenue applied to roads and bridges in Carbon and Utah counties, from which it was impossible to obtain reports. The total revenue applied to roads and bridges in 1904 amounted to $218,675.78, an increase for the 10-year period of $584,394.85, or 267.24 per cent. Information regarding revenue applied to roads in 1914 is presented by counties in Table 49.

ROAD AND BRIDGE BONDS.

The total road and bridge bonds outstanding on January 1, 1915, amounted to $541,500, of which $281,500 were county bonds and $260,000 State bonds. In 1914 there was expended from county bond issues $6,899.27, and there was voted and sold $10,500. The State bonds were issued in 1911. They bear 4 per cent interest and are to be paid off by the deferred serial method between 1922 and 1934. Detailed information regarding county bond issues is presented in Table 67.

WASHINGTON.[1]

Washington has a land area of 66,836 square miles, and a total road mileage of 42,428 of which 4,922.09 miles, or 11.61 per cent, were surfaced at the close of 1914.

There is a State highway commissioner, appointed by the governor for a term of four years. There also is a State highway board, composed of the governor, the State highway commissioner, the State auditor, the State treasurer, and a member of the

[1] The information for Washington was collected under the direction of this office by W. R. Roy, State highway commissioner, and collaborator of the U. S. Department of Agriculture.

public service commission, appointed by the governor. The construction and maintenance of State highways is under the jurisdiction of the State highway board, of which the State highway commissioner is secretary and executive officer. The State highway commissioner may employ such engineering and other assistants as may be necessary in the prosecution of State road work and in the performance of other duties imposed by law upon his office. He is required to advise local road officials in all road and bridge matters.

State highways are divided into two classes: Primary and secondary, in the order of their importance. The general route of these roads is established by the legislature, which also makes specific appropriations for their improvement from the funds derived from taxes. Primary roads are constructed and maintained by the State, while secondary roads are constructed by the State and maintained by the counties.

Permanent highways are defined to mean improved public roads constructed along a main line of travel, either beginning at some trade center or an extension of an existing road beginning at some trade center. The individual owners of two-thirds of the linear feet of land fronting on any public highway or section thereof may petition the board of county commissioners for the improvement of the road. After submission by the board of county commissioners of a resolution for the improvement the State highway commissioner passes upon it, and the county engineer makes surveys, plans, specifications, and estimates. Fifteen per cent of the cost of the improvements, or as much more as may be stated in the petition of land owners, is assessed against the land lying within not less than 660 feet and not more than 3 miles on each side of the center line of the highway, which assessment may be discharged in one payment, or in 10 annual installments, and bonds issued in anticipation of the payment. A State tax of 1½ mills on the dollar is levied, and the proceeds credited to the permanent highway fund, which is used for the construction and maintenance of permanent highways in the several counties in proportion to the amount of such fund collected in each county.

The boards of county commissioners of the several counties have general supervision over the roads in their respective counties. They divide the county, or any part thereof, into suitable and convenient road districts, and appoint a road supervisor for each district. Each county commissioner is ex officio road commissioner on the several road districts in his commissioner district, and must see that all orders of the board of county commissioners with reference to roads in his district are carried out. The road supervisor, under the direction of the board of county commissioners, is required to keep all roads and bridges of his district free from obstructions and in as good repair as the available funds will permit.

The county engineer is elected for a term of two years, and is required to be a competent civil engineer and surveyor. He makes surveys and prepares plans, specifications and estimates of all roads ordered to be improved, and recommends to the board of county commissioners road and bridge improvements to be made, together with the estimated cost.

On petition of the owners of two-thirds of the linear feet frontage on any county road, the county board of commissioners may cause such road to be improved and assess the cost on the lands especially benefited thereby.

A State tax of 1 mill is levied annually, and the proceeds placed in the public highway fund. Of the taxes so levied and collected, 7½ per cent are set aside annually by the State treasurer to be used exclusively under the direction of the State highway commissioner for the repair and maintenance of roads already established and constructed.

All net proceeds from the licensing and registration of motor vehicles are credited to the permanent highway fund and distributed to the several counties in proportion to the amounts paid by each into said fund, to be used for the maintenance and repair of permanent highways.

For the purpose of raising revenue for the construction, maintenance, and repair of county roads, bridges, and wharves, the board of county commissioners annually levies a tax of not to exceed 4 mills on all taxable property in the county, the proceeds going into the general road and bridge fund. There also is levied a tax of not to exceed 10 mills on the taxable property in each road district to constitute a district road fund.

County boards of commissioners may issue bonds for road purposes in an amount not to exceed 5 per cent of the taxable valuation of all property in their respective counties, when authorized by a three-fifths vote of those voting at an election thereon.

County and State convicts may be worked upon the public highways, and State convicts may also be worked in the preparation of road material. The legislature makes appropriations to defray the expenses of equipping and operating quarries for the purpose of preparing road materials by convict labor.

ROAD MILEAGE.

Washington had, at the close of 1914, 42,428 miles of public roads, of which 4,922.09 miles, or 11.61 per cent, were surfaced. Of the surfaced roads 502.82 miles were macadam, 165.52 miles bituminous macadam, 3,924.48 miles gravel, 83.50 miles sand-clay, 26.35 miles brick, 79.42 miles concrete, and 140 miles surfaced with other materials. There were also reported 9,450.76 miles of graded and drained earth road.

The total of public roads reported for 1909 was 34,284 miles, of which 4,520.68 miles, or 13.19 per cent, were surfaced, an increase in surfaced roads of 401.41 miles. Information regarding the total and surfaced mileage of roads in each county for the year 1914 is shown in Table 27.

REVENUES APPLIED TO ROADS AND BRIDGES.

The total revenue applied to roads in 1914 amounted to $7,944,717.38. Of this $7,128,934.47 was derived from the general tax for State, county, township, and district roads, $509,146.50 from county and district road bonds, $261,636.41 from other sources, and $45,000 from State appropriations for the maintenance of the State highway department. The above items do not include expenditures for the maintenance of State quarries for which the legislature in 1913 appropriated a revolving fund of $200,000. Receipts from the licensing and registration of automobiles were not applied to roads in 1914.

The total revenue applied to roads and bridges in 1904 amounted to $1,436,070.19, an increase for the 10-year period of $6,508,647.19, or 453.22 per cent. The amounts received from general taxation for State, county, and township roads and bridges, and other revenue applied to this purpose in 1914 are shown by counties in Table 50.

ROAD AND BRIDGE BONDS.

The total county and district road and bridge bonds outstanding on January 1, 1915, amounted to $1,555,000, of which $509,146.50 was expended in 1914. In that year there was voted $133,274.27 and $35,000 of road and bridge bonds sold. No State road bonds have been issued, but $190,000 State bonds were issued in 1911 for the construction of a bridge across the Columbia River at Wenatchee. Information regarding road and bridge bonds is shown by counties in Table 68.

WISCONSIN.[1]

Wisconsin has a land area of 55,256 square miles, and a total road mileage of 75,707 of which 13,399.47 miles, or 17.6 per cent, were surfaced at the close of 1914.

There is a State highway commission which consists, ex officio, of the State geologist and the dean of the engineering college of the State university, and of three other

[1] The information for Wisconsin was collected under the direction of this office by A. R. Hirst, State highway engineer, and collaborator of the U. S. Department of Agriculture.

members appointed by the governor for six years each. The commission has charge of all matters pertaining to the expenditure of State funds in the improvement of public roads and bridges, advises towns, villages, and counties in the construction of roads or bridges, makes regulations for surveying, planning, constructing, and inspecting all roads constructed under the State-aid law, which regulations must be observed by counties in order to render them eligible to receive State aid, reviews the prospective State highways selected by the county boards and may alter them to make the systems of adjoining counties connect into continuous and direct routes, and, on request of the county board of any county, takes direct charge of the construction and maintenance of State-aid roads and bridges in such county.

The county board of each county not having already done so is required to select a system of prospective county highways to be known as the county system of prospective State highways and to embrace, at first, not to exceed 15 per cent of the road mileage of the county and include the main-traveled roads leading into each town in the county. The county and towns together pay not less than 66⅔ per cent of the cost of improvement and the State pays the balance. If the county system of prospective State highways is constructed by the county and State alone, the county pays 60 per cent and the State 40 per cent of the cost.

All State highways shall be maintained at the expense of the county in which they are located, except that such portions as pass through or lie within incorporated villages shall be maintained by such villages. The legislature appropriates funds for the support of the State highway commission and for State aid, and requires such State tax to be levied as is necessary to raise the sums appropriated. The appropriation for State aid is apportioned among the counties of the State in proportion to the ratio which the assessed valuation of each county bears to the total assessed valuation of the State and is used for the purpose of improving the county system of prospective State highways.

By an act passed in 1915, there is appointed by the railroad commission of Wisconsin, subject to approval by the governor, a State chief engineer who is required to have a general knowledge of the subject and profession of engineering and may be removed by the governor for cause after hearing. The chief engineer has charge of and supervision over all engineering or architectural work performed by or for the State or by or for any of the departments, boards, or commissions of the State, and is required to furnish engineering and architectural services to any branch or department of the State government upon request.

Each county board annually elects a committee of not less than three nor more than five members, to be known as the county State road and bridge committee. Such committee is authorized to purchase and sell county-road machinery, as authorized by the county board, to determine whether each piece of State road and bridge construction in the county shall be let by contract or done by day labor and to enter into such contracts, to direct the expenditure of all maintenance funds, to audit all claims in connection with the construction of State-aid roads and bridges, to assist in the letting and to approve all contracts for county-aid bridges costing over $500.

The county board of each county selects a county highway commissioner, who must pass examination by the State highway commission. The county highway commissioner has charge, under the direction of the county committee, of the construction of all highways built with State or county aid and of the maintenance of all State highways. He is required to make an annual report to the State highway commission and to the county board.

Whenever any highway, road or street passes through or connects two or more towns, cities, villages or parts thereof, the county board may adopt the same as a trunk road for the purpose of improving it. In order to improve such road an assessment district may be formed which may include property not abutting upon such highway, road, or street, but tributary thereto and benefited thereby. One-third of the cost of im-

proving such highway, road or street may be assessed against the property in such assessment district in proportion to the benefits accruing.

The annual town meeting in each town elects three supervisors, who constitute the town board of supervisors and have the care and supervision of all highways therein, except as otherwise provided by law. The town board divides the town into districts and appoints a superintendent of highways for each district. The superintendent of highways, under the direction of the town board, has charge of the construction and repair of highways and bridges in the town.

The annual town meeting determines by vote if highway taxes shall be paid in money or in labor. Unless the town has voted in favor of paying the highway taxes in labor, it may direct that the money derived from such taxes be expended under the direction of the town board, or by three highway commissioners to be elected for that purpose. The supervisors of each town in which the highway taxes are payable in labor may appoint a suitable person to oversee and direct the road work and exercise supervision over all superintendents of highways therein.

The county board shall levy each year a tax of not over 2 mills on all taxable property in the county to maintain the county road and bridge fund, which tax shall be in addition to all other highway taxes, and the proceeds shall be expended in building the prospective system of State highways. The county board may raise money for the original improvement of any portion or portions of the system of prospective State highways by issuing bonds of the county in such amount, including existing indebtedness, as will not exceed the constitutional limit; provided that the amount of bonds that may be issued shall not exceed one-fifth of 1 per cent of the total assessed valuation of the county, unless authorized by a majority of the electors voting at an election thereon.

The qualified electors of each town have power at any annual town meeting to raise money for the construction and repair of roads and bridges and for other charges and expenses of the town, but the total taxes levied in any town for any one year for all town purposes, exclusive of schools, shall not exceed 1 per cent of the total assessed valuation of such town, unless a larger sum is needed for building and repairing highways and bridges, in which case the electors may vote and the proper authorities may levy not to exceed one-fourth of 1 per cent in addition to the 1 per cent.

When the amount of highway taxes assessed by the supervisors shall be deemed insufficient to keep the highways in repair, it shall be lawful for them, upon written application of the superintendents of highways, to assess an additional tax of not to exceed 7 mills on each dollar of the assessed valuation of the town. The supervisors may also levy a tax on all taxable property in the town for the purpose of opening or repairing highways, but such tax shall not exceed $600 in any year.

Highway taxes of not less than 1 nor more than 7 mills on the dollar shall be levied on the real and personal property of each superintendent district, provided that there may be levied any additional amount which may be authorized by the last preceding annual town meeting, not exceeding 10 mills in all.

Every able-bodied male between 21 and 50 years of age, not exempt by law, may be assessed by the town board of supervisors to pay a road poll tax of $1.50.

Every superintendent of highways shall call out as many taxpayers as may be necessary to clear highways blocked by snow, and the taxpayers shall be credited against highway taxes for the work so performed. If taxpayers perform labor exceeding in value the highway taxes assessed against them for the year they are compensated for their work.

The town board, upon favorable vote at the annual town meeting, designates roads to be known as "drag roads," divides them into sections, and appoints a dragman for each section. The board levies a tax of not exceeding 1 mill to pay for such dragging.

Owners of land abutting on any prospective State highway or section thereof, 1 mile or more in length and extending back on either side one-fourth of a mile or less, who

desire that such highway or section thereof be improved, may, as an inducement, provide for paying part of the town's portion of the cost by agreeing to have such land specially served taxed for not exceeding five years at a rate not to exceed $10 for each 80 rods of the respective frontages. If the improvements are made special bonds may be issued for the amount of the assessments on the lands and shall be a tax lien on all the lands.

Of the net proceeds from registering and licensing motor vehicles, 25 per cent is applied to the State highway fund and 75 per cent to county-road work.

County bonds to aid the county road and bridge fund may be issued to an amount, including existing indebtedness, not exceeding 1 per cent of the total assessed valuation of the county.

Any town, if a majority of the electors thereof shall so authorize at an election thereon, may issue bonds in any amount not exceeding the constitutional limit for the original improvement of any portion or portions of the system of the prospective State highways.

State convicts may be worked on the public highways and county convicts may be worked in preparing road materials.

ROAD MILEAGE.

According to reports received, Wisconsin had, at the close of 1914, 75,707 miles of public road, of which 13,399.47 miles, or 17.6 per cent were surfaced. Of the surfaced roads 9,597 miles were gravel, 2,054 miles sand-clay, 1,408 miles macadam, 183 miles bituminous macadam, 83.07 miles concrete, 2.4 miles brick, and 72 miles were surfaced with other materials. Wisconsin also reported 30,927 miles of graded and drained earth roads. In 1909 Wisconsin reported 61,090 miles of public road, of which 10,167.33, or 16.64 per cent, were surfaced, an increase from 1909 to 1914 of 3,232.14 miles of surfaced road. Detailed information regarding road mileage is presented by counties in Table 28.

REVENUES APPLIED TO ROADS AND BRIDGES.

The revenue applied to roads and bridges in 1914 amounted to $9,880,240.50, of which $7,882,838 was received from general county and township taxes; $1,454,704 from the general State tax apportioned to counties; $95,497.50 was the cash value of the poll and labor taxes; $87,000 was appropriated from the general State funds for administration and engineering work done by the State highway commission; $320,000 was received from local funds left over from 1913, and $40,201 was expended from local bond issue funds. In 1904 there was expended on roads and bridges $2,181,262.38 an increase for the 10-year period of $7,698,978.12, or 352.26 per cent. Information showing receipts from taxation for road and bridge purposes during the year 1914 is presented in Table 51.

ROAD AND BRIDGE BONDS.

The total county and township road bonds outstanding on January 1, 1915, amounted to $281,078, of which $21,500 was voted and sold in 1914. Bonds amounting to $16,050 were retired, and there was expended from bond funds $40,201. No State bonds have been issued for road and bridge purposes. Information regarding local bond issues is presented in Table 69.

WYOMING.[1]

Wyoming has a land area of 97,594 square miles, and a total road mileage of 14,797, of which 468.50 miles, or 3.1 per cent, were surfaced at the close of 1914.

By certain acts the legislature designated and established a State system of public highways to be constructed, repaired and maintained by the labor of convicts in

[1] In collecting the information for Wyoming assistance was rendered by C. D. Shawver, deputy State engineer and collaborator of the U. S. Department of Agriculture.

the State penitentiary, under the State commission on prison labor. It was made the duty of the commission to use all such convicts as it might deem practicable for that purpose. The work was to be done under the supervision of competent persons selected by the commission. The roads constituting the State system of public highways were to be located and surveyed under the direction of the State engineer, appointed by the governor. It also was made the duty of the State engineer to cause plans and specifications for their construction, repair and maintenance to be prepared, to select the materials of which such roads should be constructed, and to furnish a deputy engineer, whose salary and legitimate expenses should be paid by the respective counties in which work might be done. The State engineer certifies to the State commission on prison labor each month the expense rendered and incurred in respect to said highways during the preceding month in each county through which the same may pass, and the boards of county commissioners pay to the State engineer the amount due for the work done in their respective counties out of the road fund or general fund of the county. Boards of county commissioners secure the right of way for such highways and construct necessary bridges, in accordance with the plans of the State engineer; provided that, as far as practicable, bridges across small streams shall be constructed by the use of convict labor.

The board of county commissioners of each county is vested with power and jurisdiction over the laying out, alteration or discontinuance of public highways therein. The boards also have jurisdiction over the granting of licenses for keeping ferries, toll bridges, and toll gates. The boards divide their respective counties into road districts and when the county is so divided a district road supervisor is elected for each district. If the county be not divided into road districts a county road supervisor is elected.

Bridges between counties may be constructed by the counties interested, each county to pay one-half, or other pro rata share, of the cost. If such cost will burden the road and bridge fund unreasonably, or if it will exceed $5,000, the board of county commissioners may cause a portion to be paid out of the road and bridge fund of the county and may levy a special tax, not exceeding 2 mills on each dollar of taxable property in the county, to raise the balance.

An inheritance tax is provided, the proceeds of which in each county are to be expended for the permanent improvement of the county roads outside the limits of incorporated cities and villages. The county boards are authorized to levy a tax of not to exceed 3 mills on each dollar of taxable property in the county, the proceeds of which constitute a general county road fund. At the time of making the annual levies for county purposes the county board may levy upon each able-bodied man between 21 and 50 years of age, not exempt by law, a special poll or road tax of $2, which may be paid in cash or by one day's labor on the roads. If the funds thus derived be insufficient for the work in any road district, the county board may appropriate necessary additional funds from the general road fund. The proceeds of the special poll or road tax, collected from persons residing within incorporated cities or towns of the State, are paid into the treasury of such cities or towns.

The net proceeds from the registration and licensing of motor vehicles is paid to the county from which collected, to be expended for the temporary improvement of the county roads outside of the limits of incorporated towns or cities.

The county boards of commissioners are authorized to work prisoners confined in any county jail upon the public highways of the county.

ROAD MILEAGE.

At the close of 1914 Wyoming had, according to reports received, a total of 14,381 miles of public road, of which 52.5 miles, or 0.36 per cent, were surfaced with gravel. There were also reported 1,672 miles of graded and drained earth roads. In the Yellowstone Park, which is located in the northwest corner of the State, there are 416

miles of Government roads, practically all of which are surfaced with gravel or stone. If this mileage is included, the total mileage for the State at the close of 1914 amounted to 14,797, of which 468.5 miles, or 3.1 per cent, were surfaced. In 1909 Wyoming had 10,569 miles of road, of which only 416 miles in the Yellowstone were surfaced, thus indicating a gain in surfaced mileage during the five-year period of 52.5 miles. Detailed information regarding road mileage for 1914 is given in Table 29.

REVENUES APPLIED TO ROADS AND BRIDGES.

The total revenue applied to roads and bridges in 1914 amounted to $669,661.16, of which $423,215.31 was derived from county funds, $6,237 from a State appropriation for the equipment of State convict road camps, and $240,208.85 from United States Government appropriations for repair and betterment of roads in the Yellowstone National Park. The latter sum was expended under the direction of the Corps of Engineers of the United States Army. The county revenues were obtained principally from general county funds, automobile licenses, and poll taxes. The total amount applied to roads and bridges in 1904 amounted to $345,931.73, an increase for the 10-year period of $323,729.43, or 93.58 per cent. Information regarding revenue applied to roads and bridges during 1914 is presented in Table 52.

No county or State bonds have been issued in Wyoming for road and bridge purposes.

APPENDIX A.

The following are the tables referred to in the foregoing text giving information as to road mileage in the States discussed.

ARIZONA.

TABLE 7.—*Mileage of public roads outside of incorporated cities and towns, 1914.*

County.	Total mileage of all roads.	Surfaced roads.								Graded and drained earth.
		Macadam.	Bituminous macadam.	Gravel.	Sand-clay.	Other hard-surfaced roads.	Total of surfaced roads.	Percentage of roads surfaced.	Increase in surfaced mileage over 1909.	
Apache	350	.....	.....	20	30	.....	50	14.28	.....	100
Cochise	1,734	.....	3.5	4	.....	.....	7.5	.43	— 14.5	58
Coconino	1,544	.....	.....	40	.....	[1] 50	90	5.82	83	295
Gila	546.5	.....	.....	6.5	.....	.....	6.5	1.18	6.5	40
Graham	298	.....	.....	.....	.....	.....	.....	.....	— 3	23
Greenlee	200	.....	.....	40	.....	.....	40	20	40	60
Maricopa	2,260	.....	10	.....	.....	[2] 8	18	.79	— 16	1,140
Mohave	550	1	.....	.....	.....	.....	1	.18	1	80
Navajo	600	.....	.....	1	.....	.....	1	.16	— 11	30
Pima	1,550	.73	.....	14.2	.....	.....	14.93	.96	14.93	23.96
Pinal	400	.....	.....	.....	.....	.....	.....	.....	.....	200
Santa Cruz	200	5	.....	.....	.....	.....	5	2.50	5	11
Yavapai	523	.....	.....	.....	.....	.....	.....	.....	— 20	135
Yuma	1,319.5	4.5	.....	.....	15	.....	19.5	1.47	—105.5	500
Total	12,075	11.23	13.5	125.7	45	58	253.43	2.09	— 19.57	2,695.96

[1] Cinders.

[2] 1 mile, concrete; 7 miles, oil and caliche (gravel).

CALIFORNIA.

TABLE 8.—*Mileage of public roads outside of incorporated cities and towns, 1914.*

County.	Total mileage of all roads.	Surfaced roads.									Graded and drained earth.
		Concrete.	Macadam.	Bituminous macadam.	Gravel.	Sand-clay.	Oiled earth.	Total of surfaced roads.	Percentage of roads surfaced.	Increase in surfaced mileage over 1909.	
Alameda	533	33.79	62.7	17.33	215.09	.....	.....	328.91	61.75	— 96.09	84.65
Alpine	200	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Amador	580	.....	.....	.....	.....	.....	.....	.....	.....	— 35	.....
Butte[1]	1,200	12.8	5	.....	400	.....	.....	417.8	34.81	12.8	.....
Calaveras	600	.....	.....	.....	.....	.....	.....	.....	.....	— 45	40
Colusa	1,169	11	.....	.....	556	.....	.....	567	48.5	265	563
Contra Costa	635	5.4	300	30	.....	.....	.....	335.4	52.78	185.4	100
Del Norte	120	.....	.....	.....	.....	.....	.....	.....	.....	— 42.5	94
El Dorado	900	6	.....	6	.....	.....	.....	12	1.33	7	300
Fresno	3,800	27	14	1	.....	.....	1,080	1,122	29.52	952	1,960
Glenn	1,368	27.5	.....	.5	395	.....	.....	423	30.92	285	188
Humboldt	1,348	.....	15	.....	310	110	.....	435	32.27	20	30
Imperial	590	11.7	.....	.....	.....	6	.....	17.7	3	17.7	345
Inyo	923	.....	.....	.....	.....	.....	.....	.....	.....	.....	300

[1] Concrete mileage reported by State geologist, balance 1909 figures.

CALIFORNIA—Continued.

TABLE 8.—*Mileage of public roads outside of incorporated cities and towns, 1914*—Con.

County.	Total mileage of all roads.	Surfaced roads.									Graded and drained earth.
		Concrete.	Macadam.	Bituminous macadam.	Gravel.	Sand-clay.	Oiled earth.	Total of surfaced roads.	Percentage of roads surfaced.	Increase in surfaced mileage over 1909.	
Kern	1,400	61.8	.....	.....	.....	.....	500	561.8	40.12	459.8	200
Kings[1]	500	9	.....	.....	.....	.....	92	101	20.2	9	.....
Lake	700	.....	.....	.....	50	.....	.....	50	7.14	−110	150
Lassen	1,700	.....	.....	.....	.....	.....	.....	.....	.....	− 50	700
Los Angeles	3,500	50.8	.....	409	.....	.....	.....	459.8	13.13	−625.2	.....
Madera	1,250	17.1	.....	34	.....	.....	7	58.1	4.64	28.1	940
Marin[2]	309	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Mariposa	460	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Mendocino	800	4	.....	7.7	.....	.....	.....	11.7	1.46	11.7	50
Merced	1,218	37	.....	.....	20	261.25	.....	318.25	26.12	181.25	600
Modoc	650	.....	.....	.....	.....	.....	.....	.....	.....	− 10	300
Mono	425	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Monterey	1,090	20.7	50	.....	.....	.....	.....	70.7	6.48	− 29.3	467
Napa[1]	560	6.5	3	.....	450	.....	.....	459.5	82.05	6.5	.....
Nevada	800	.....	25	.....	.....	.....	.....	25	3.12	− 5	150
Orange	615	97	.....	5	.....	.....	350	452	73.49	422	50
Placer	1,200	10.1	5	.....	.....	.....	.....	15.1	1.25	8.1	50
Plumas[2]	385	.....	.....	.....	10	.....	.....	10	2.59	.....	.....
Riverside	1,714	10.3	.....	8	.....	.....	.....	18.3	1.06	− 35.7	112
Sacramento	1,636	29.7	.7	82.97	10	.....	50	173.37	10.59	67.37	500
San Benito	468	4.7	8	6.9	50	140	.....	209.6	44.78	−100.4	160
San Bernardino	700	75	.....	50	200	.....	300	625	89.28	625	.....
San Diego	5,000	42.8	.....	2.3	.....	.....	.....	45.1	.9	−404.9	1,743
San Joaquin	1,350	.....	.....	34	.....	.....	.....	34	2.51	− 3	294
San Luis Obispo	1,353	39.9	.....	.....	.....	.....	3	42.9	3.08	−120.1	750
San Mateo	284	40	23	32	.....	.....	25	120	42.25	−108	134
Santa Barbara	1,143	21.7	.....	17	.....	.....	22.40	61.1	5.34	− 4.9	23.75
Santa Clara	675	45.1	250	42	92	.....	.....	429.1	63.57	−396.9	75
Santa Cruz	450	.....	10	3	50	.....	.....	63	14	12.75	291
Shasta	1,800	.....	.....	.....	65	.....	.....	65	3.61	−171	26.4
Sierra	379	.....	5	.....	.....	.....	.....	5	1.31	5	50
Siskiyou	1,300	.....	16.5	.....	66	.....	.....	82.5	6.34	58	626
Solano	700	34.2	5	10	.....	.....	40	89.2	12.74	54.2	100
Sonoma	1,420	20.2	.....	.....	.....	.....	.....	20.2	1.41	−724.8	1,400
Stanislaus	1,200	21.7	.....	40	40	.....	.....	101.7	8.47	46.7	920
Sutter	375	12	.....	15	65	40	.....	132	35.2	74	100
Tehama	750	9	7	.....	100	.....	.....	116	15.46	50	600
Trinity	400	.....	.....	.....	.....	.....	.....	.....	.....	− 5	248
Tulare	3,600	13.7	.....	.....	.....	.....	1,000	1,013.7	28.15	953.7	1,600
Tuolumne	860	.....	.....	.....	.....	.....	20	20	23.25	− 47	740
Ventura	554	31.6	3	.....	.....	.....	.....	34.6	6.25	− 65.4	24.5
Yolo	800	25	15.5	15	419.5	25	.....	500	62.5	107.5	200
Yuba	600	3.4	14	9.2	.....	.....	.....	26.6	4.43	11.6	10
Total	61,039	929.19	837.4	877.9	3,563.59	582.25	3,489.40	10,279.73	16.84	1,691.98	18,389.3

[1] Concrete mileage reported by State geologist, balance 1909 figures. [2] No report; 1909 mileage.

COLORADO.

TABLE 9.—*Mileage of public roads outside of incorporated cities and towns, 1914.*

County.	Total mileage of all roads.	Surfaced roads.						Graded and drained earth.
		Gravel.	Sand-clay.	Other hard-surfaced roads.	Total of surfaced roads.	Percentage of roads surfaced.	Increase in surfaced mileage over 1909.	
Adams	673	40	.....	4	44	6.53	— 8	320
Alamosa	564	3	.....	.....	3	.53	3	62
Arapahoe	378	24.5	.....	.....	24.5	5.48	8.5	100
Archuleta	208	4	.....	.....	4	1.92	4	204
Baca	117	.....	.....	.....	.....	.....	.....	63
Bent	506	.....	.....	6	6	1.18	.....	400
Boulder	620	67	40	.....	107	17.26	67	513
Chaffee	325	40	25	.....	65	20	65	20
Cheyenne	164	.....	.....	.....	.....	.....	.....	164
Clear Creek	110	.....	.....	.....	.....	.....	.....	45
Conejos	327	2	25	.....	27	8.25	27	140
Costilla	126	.....	.....	.....	.....	.....	— 8	33
Crowley	346	.....	.....	.....	.....	.....	.....	175
Custer	351	.....	.....	17	17	4.84	17	.....
Delta	875.5	.....	.....	.....	.....	.....	.....	162
Denver[1]	.....	.....	.....	.....	.....	.....	.....	.....
Dolores	100	.....	.....	.....	.....	.....	.....	8
Douglas	576	.....	.....	13	13	2.25	13	.....
Eagle	270	.....	.....	.....	.....	.....	.....	110
Elbert	1,700	.....	.....	.....	.....	.....	.....	200
El Paso	2,000	75	.....	35	110	5.5	80	1,443
Fremont	460	.....	.....	.....	.....	.....	— 2	340
Garfield	510	10	.....	.....	10	1.98	8	100
Gilpin	124	.....	.....	.....	.....	.....	.....	25
Grand	386	.....	.....	5	5	1.29	5	.....
Gunnison	573	.....	.....	.....	.....	.....	.....	238
Hinsdale	225	.....	.....	.....	.....	.....	.....	75
Huerfano	575	.....	.....	.....	.....	.....	.....	175
Jackson	305	.....	.....	.....	.....	.....	.....	111
Jefferson	634	75	10	[2] 1	86	13.56	71	369
Kiowa	200	.....	25	.....	25	12.5	25	.....
Kit Carson	1,076	.....	.....	.....	.....	.....	.....	70
Lake	165	.....	50	.....	50	30.3	46	15
La Plata	1,000	.....	.....	[3] 1	1	.1	1	299
Larimer	1,500	60	.....	[4] 2.25	62.25	4.15	62.25	937.75
Las Animas	1,000	.....	.....	.....	.....	.....	.....	100
Lincoln	600	.....	.....	.....	.....	.....	.....	300
Logan	1,042	.....	.....	15	15	1.43	8.5	.....
Mesa	2,200	.....	.....	.....	.....	.....	.....	300
Mineral	98	.....	.....	.....	.....	.....	.....	98
Moffat	550	.....	.....	.....	.....	.....	.....	97
Montezuma	500	.....	.....	.....	.....	.....	.....	.....
Montrose	1,008.6	.....	.....	.....	.....	.....	.....	534.6
Morgan	1,000	16	.....	.....	16	1.6	16	600
Otero	775	10	15	.....	25	3.22	5	600
Ouray	202	3	.....	.....	3	1.48	3	199
Park	376	6	.....	.....	6	1.59	6	150
Phillips	314	.....	5	.....	5	1.59	5	31
Pitkin	193	.....	.....	6	6	3.1	6	38
Prowers	769	.....	8.25	1.25	9.5	1.23	4.5	90.5
Pueblo	1,890	17	1	42	60	3.17	48	75
Rio Blanco	400	.....	.....	.....	.....	.....	.....	40
Rio Grande	350	.....	100	.....	100	28.57	62	.....
Routt	456	.....	.....	3	3	.65	3	.....
Saguache	1,575	.....	75	.....	75	4.76	75	300
San Juan	125	.....	.....	.....	.....	.....	.....	125
San Miguel	318.87	6	32.87	.....	38.87	12.19	38.87	21
Sedgwick	165	3.75	.....	.....	3.75	2.27	— .25	32
Summit	214	.....	.....	.....	.....	.....	.....	100
Teller	186	12	.....	17	29	15.59	29	157
Washington	1,760	.....	20	.....	20	1.29	20	200
Weld	3,101	100	.....	[3] 1	101	3.25	41	1,000
Yuma	542	.....	18	.....	18	3.32	18	.....
Total	39,779.97	574.25	450.12	169.50	1,193.87	3	873.37	12,104.85

[1] All within city limits.
[2] Concrete.
[3] Plain macadam.
[4] Concrete, 1.25 miles; plain macadam, 1 mile.

IDAHO.

TABLE 10.—*Mileage of public roads outside of incorporated cities and towns, 1914.*

County.	Total mileage of all roads.	Surfaced roads.							Graded and drained earth.
		Macadam.	Gravel.	Sand-clay.	Other hard surfaced roads.	Total of surfaced roads.	Percentage of roads surfaced.	Increase in surfaced mileage over 1909.	
Ada	620	.....	57	5	[1] 8	70	11.29	63	.....
Bannock	600	.....	26	.....	.....	26	4.33	26	.....
Bear Lake	500	.....	5	.....	.....	5	1	— 30	30
Bingham	600	7	.....	20	.....	27	4.5	27	150
Blaine	800	.....	10	45	.....	55	6.87	55	60
Boise	1,000	.....	2	.....	.....	2	.2	2	.....
Bonner	519	.....	5	.....	.....	5	.96	5	219
Bonneville	525	.....	.....	.....	.....	.....	.....	.....	175
Canyon	500	.....	10	20	.....	30	6	.....	.....
Cassia	600	.....	10	.....	.....	10	1.66	10	48
Clearwater	400	.....	.....	.....	.....	.....	.....	.....	150
Custer	355	.....	.....	.....	.....	.....	.....	.....	15
Elmore	500	.....	.....	18	.....	18	3.6	18	275
Franklin	265	.....	10	.....	.....	10	3.77	10	62
Fremont	500	.....	.....	.....	[2] 3	3	.6	3	90
Gooding	350	.....	.....	.....	.....	.....	.....	.....	100
Idaho	1,400	.....	.....	.....	.....	.....	.....	— 11.5	1,000
Jefferson	300	.....	.....	75	.....	75	25	75	.....
Kootenai	350	.....	.....	.....	.....	.....	.....	—150	150
Latah	1,100	2.5	2	12	.....	16.5	1.5	1.5	.....
Lemhi	850	.....	.....	.....	.....	.....	.....	.....	50
Lewis	500	.....	.....	.....	.....	.....	.....	.....	200
Lincoln	874	.....	4	123	.....	127	14.53	127	425
Madison	300	.....	25	.....	.....	25	8.33	25	275
Minidoka	1,455	.....	.....	5	.....	5	.34	5	150
Nez Perce	825	8	.....	.....	[3] 8.5	16.5	2	14.5	300
Oneida	400	.....	.....	100	.....	100	25	90	100
Owyhee	800	.....	.....	20	.....	20	2.5	.....	.....
Power	556	.....	.....	6	.....	6	1.07	6	150
Shoshone	325	25	.....	.....	.....	25	7.69	—205	.....
Twin Falls	5,077	.....	2	.....	.....	2	.03	2	75
Washington	650	.....	.....	.....	.....	.....	.....	.....	150
Total	24,396	42.5	168	449	19.5	679	2.78	168.5	4,399

[1] 3.5 miles macadam with bitumen; 4.5 miles concrete. [2] Cinders. [3] Bituminous macadam.

ILLINOIS.

TABLE 11.—*Mileage of public roads outside of incorporated cities and towns, 1914.*

County.	Total mileage of all roads.	Surfaced roads.[1]										Graded and drained earth.
		Brick.	Concrete.	Bituminous macadam.	Macadam.	Gravel.	Sand-clay.	Other hard-surfaced roads.	Total of surfaced roads.	Percentage of roads surfaced.	Increase in surfaced mileage over 1909.	
Adams	1,562	.....	2	.....	20	79	65	5	171	10.94	— 6	.....
Alexander	244	.....	.....	2	.....	37	.....	1	40	16.39	20	102
Bond	676	1.5	1.5	.....	7	.....	.....	.....	10	1.47	3	440
Boone	512	.....	1	.....	45	179.5	15	....	240.5	46.97	— 8.5	146
Brown	550	.....	.....	.....	.....	.....	200	....	200	36.36	199	100
Bureau	1,415	.....	4	.....	2	551	.....	.....	557	39.36	66	300
Calhoun	355	.....	.....	.....	.....	.....	100	....	100	28.16	98	100
Carroll	759	.....	.....	.....	34	11	2	....	47	6.19	1	313
Cass	705	.....	.....	2.5	.....	.....	34.5	[2]35	72	10.21	72	200
Champaign	2,000	4.5	.....	.....	.....	.....	.....	.....	4.5	.22	— .5	1,806
Christian	1,295	3	.....	.....	.....	.....	.....	.....	3	.23	— 14	1,176
Clark	1,000	.....	1	.....	63	39	35	....	138	13.8	90	479
Clay	847	.....	1	.....	.....	.....	.....	.....	1	.11	1	107
Clinton	768	.....	.....	.....	2	.....	.....	.....	2	.26	2	703
Coles	1,069	3.12	.25	7.25	15.75	86.25	403	....	515.62	48.23	489.62	553.38
Cook	1,143	.....	18.3	.2	125.58	164.85	.....	.....	308.93	27.02	—509.07	100.72
Crawford	801	6	4.5	3	69.5	42.2	25	....	150.2	18.75	125.2	287
Cumberland	704	.....	.....	.....	.....	.....	.....	.....	.....	.....	— 5	250
Dekalb	1,094	.....	5.6	19.25	11.5	463.8	.....	.....	500.15	45.71	85.15	272.90
Dewitt	726	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	313
Douglas	800	5.75	2	.....	27.5	.....	.....	.....	35.25	4.4	35.25	280
Dupage	552	.....	2.5	3	45	359.5	.....	.....	410	74.27	— 20	142
Edgar	923	13	.....	.....	52	255	.....	.....	320	34.66	85	399
Edwards	446	.....	.....	.....	.....	1.3	.....	.....	1.3	.29	1.3	294
Effingham	1,052	.....	1.5	.....	4	1	.....	.....	6.5	.61	1.5	1,006.75
Fayette	1,400	.....	1.87	.....	3	.....	.....	.....	4.87	.34	.87	182
Ford	924	1.12	.....	.....	1	98.5	.....	.....	100.62	10.88	5.62	731.2
Franklin	716.5	.....	.....	.....	.....	.....	.....	.....	.....	.....	— 6	.....
Fulton	1,494	9	.....	.....	.....	.....	108	....	117	7.83	116	1,125
Gallatin	400	.....	.....	.....	.....	.....	.....	.....	.....	.....	— 2	.....
Greene	853.75	.....	.....	.5	.5	.....	4	....	5	.58	5	336
Grundy	739	.....	1.75	.....	35.5	63	.....	.....	100.25	13.56	2.25	.....
Hamilton	900	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	100
Hancock	1,381	.....	.....	2	47	111	334	....	494	35.77	470	680
Hardin	193	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	20
Henderson	620	.....	.....	.....	.....	1	16	....	17	2.74	17	211
Henry	1,379	.....	.....	2	.....	3	.....	.....	5	.36	— 3	1,171
Iroquois	2,119	.....	6.75	3	37.5	44	.....	.....	91.25	4.3	11.25	1,551.5
Jackson	729	.75	.....	10	6.25	2	.....	.....	19	2.6	11	403
Jasper	900	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	400
Jefferson	70	.....	1	.....	.....	.....	.....	.....	1	1.42	1	29
Jersey	528.38	.....	.....	1.25	1.12	.....	.....	.....	2.37	.44	— 2.63	526.01
Jo Daviess	914	.09	14.8	.....	8.15	.....	2	....	25.04	2.73	— 26.96	121.1
Johnson	450	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	137
Kane	835.73	.2	5.85	1.5	21.05	638.98	.....	[3]3.7	671.28	80.32	—128.72	68.25
Kankakee	1,458	.....	1.75	.....	158.75	10.5	289.5	....	460.5	31.58	303.5	741.75
Kendall	529	.....	.....	.....	11.5	251.77	.....	.....	263.27	49.76	— 7.73	203.1
Knox	1,318	.25	.....	.....	.....	1	.....	.....	1.25	.09	— 1.75	548
Lake	728	.....	3	1.5	40	292	.....	.....	336.5	46.22	25.5	275
La Salle	2,018	1.5	3	.....	40	560	75	....	679.5	33.67	166.5	134.1
Lawrence	687	.....	4.62	.....	25	35	.....	.....	64.62	9.4	37.62	141
Lee	1,255	.06	2.4	7	153	53	2	[3]	220.46	17.56	68.46	500
Livingston	2,016	.....	2.5	1.5	22	53	.....	.....	79	3.91	2	1,874
Logan	927.75	.....	3.25	3	2	6.5	8	....	22.75	2.45	16.75	844.75
McDonough	1,147	.....	.....	.....	1.5	.....	.....	.....	1.5	.13	— .5	527
McHenry	1,002	.....	2.75	.....	.....	900	.....	.....	902.75	90.09	122.75	99.25
McLean	2,115	.....	2.5	.....	13.5	44	.....	.....	60	2.83	— 56	1,000
Macon	[4]1,025	.....	.....	.....	.....	68	.....	.....	[4]68	6.63	.....	.....
Macoupin	1,451.5	.5	3	.....	.....	.....	.....	.....	3.5	.24	3.5	800
Madison	1,500	2.25	10.75	4	16.75	.....	.....	[3]	36.75	2.45	— 9.25	750
Marion	1,173	.....	1	.....	.5	.....	.....	.....	1.5	.12	— .5	131
Marshall	604	.....	.....	.....	.....	46	116.75	....	162.75	26.94	112.75	441.25
Mason	760	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	489
Massac	411	.....	.....	.....	.....	47	.....	.....	47	11.43	— 2	364

[1] Includes all classifications of surfaced roads; 1909 report included stone and gravel only.
[2] Oiled roads.
[3] Cinders.
[4] 1909 mileage report.

ILLINOIS—Continued.

TABLE 11.—*Mileage of public roads outside of incorporated cities and towns, 1914*—Con.

County.	Total mileage of all roads.	Surfaced roads.[1]										Graded and drained earth.
		Brick.	Concrete.	Bituminous macadam.	Macadam.	Gravel.	Sand-clay.	Other hard-surfaced roads.	Total of surfaced roads.	Percentage of roads surfaced.	Increase in surfaced mileage over 1909.	
Menard	411	.....	0.5	.....	.....	.....	.....	.....	0.5	0.12	0.5	.....
Mercer	953	.....	.....	.....	.....	.....	55	.....	55	5.77	55	493
Monroe	530	.....	.....	.....	35	.....	86	.....	121	22.83	100	409.
Montgomery	1,250	.....	.....	.....	2.5	.....	.....	.....	2.5	.2	— 2.5	.....
Morgan	1,001.33	.....	1.33	15	.....	.....	.....	.....	16.33	1.63	16.33	489
Moultrie	683.5	.....	.....	1	.5	.....	121	.....	122.5	17.92	122.5	558
Ogle	1,337	2	.....	4	175	76.75	.....	.....	257.75	19.27	62.75	711
Peoria	1,138.85	.....	2.25	2	.....	123.5	.....	.....	127.75	11.21	— 98.25	265.55
Perry	700	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	350
Piatt	737.5	1	.....	.....	.....	.....	.....	.....	1	.13	1	600
Pike	1,541	.....	1.57	.....	6	26	308.2	.....	341.77	22.17	290.77	.....
Pope	510	.....	.....	.....	.....	.....	.....	.....	.....	.....	— 7	278
Pulaski	295	.....	.....	.....	.....	43	.....	.....	43	14.57	39	142
Putnam	310	.....	.....	.....	.....	60	.....	.....	60	19.35	23	200
Randolph	800	.....	.5	.....	5	.....	.....	.....	5.5	.68	— 19.5	75
Richland	257	.....	.....	.....	.....	.....	32	.....	32	12.45	31	100
Rock Island	630	.....	1.25	.....	.....	.....	.....	.....	1.25	.19	— 31.75	.....
St. Clair	1,020	.....	.....	.....	31	.....	.....	.....	31	3.03	2	.....
Saline	585	7	1	.....	.75	.....	.....	.....	8.75	1.49	6.75	.....
Sangamon	1,500	.41	4.15	.83	.33	.....	.....	.....	5.72	.38	2.72	1,200
Schuyler	772	.....	1.28	.....	.....	.....	.....	.....	1.28	.16	— 2.72	236
Scott	450	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	375
Shelby	1,500	.....	1.21	.....	.....	.....	.....	.....	1.21	.08	.21	500
Stark	570	.....	.....	.....	.....	.....	.....	.....	.....	.....	— 2	290
Stephenson	1,090	.62	.5	.....	16	44	4	[2]5	70.12	6.43	— 32.88	285
Tazewell	1,071	.....	3	.....	.5	68	.....	.....	71.5	6.67	18.5	841.5
Union	642	.....	.....	.....	.5	49	.....	.....	49.5	7.71	24.5	280
Vermilion	1,560	10	.....	.....	8	168	.....	.....	186	11.92	— 21	.....
Wabash	500	.....	.....	.....	.....	24	.....	.....	24	4.8	24	.....
Warren	1,010	7	.....	.....	3.75	7.5	.....	.....	18.25	1.8	8.25	575
Washington	842	.....	.....	.....	.....	.....	.....	.....	.....	.....	— 2	218
Wayne	1,427	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	903
White	868.75	.....	.....	.....	9	22	.....	.....	31	3.56	23	752.25
Whiteside	1,139.5	2.3	2.85	.....	44.5	170.4	27	.....	247.05	21.68	47.05	391
Will	1,809.5	.....	4.5	17.75	163.75	399	.....	[3]2	587	32.43	177	1,200
Williamson	644.75	.....	1.19	1.5	1.25	.....	.....	.....	3.94	.61	3.94	.....
Winnebago	931	.....	2.78	5	2.38	157.5	.....	.....	167.66	18	—235.34	50
Woodford	960	.....	1.25	.....	.....	14	.....	.....	15.25	1.58	3.25	850
Total	95,647.29	82.92	148.8	121.53	1,675.11	7,052.3	2,467.95	57.7	11,606.31	12.02	2,692.31	41,143.31

[1] Includes all classifications of surfaced roads; 1909 report included stone and gravel only.
[2] Oiled roads.
[3] Shale.

INDIANA.

TABLE 12.—*Mileage of public roads outside of incorporated cities and towns, 1914.*

County.	Total mileage of all roads.	Surfaced roads.								Graded and drained earth.
		Concrete.	Bituminous macadam.	Macadam.	Gravel.	Other hard-surfaced roads.	Total of surfaced roads.	Percentage of roads surfaced.	Increase in surfaced mileage over 1909.	
Adams	774	.....	.....	390	112	.....	502	64.8	247	272
Allen	900	8	7	290	100	.....	405	45	—286.5	295
Bartholomew	955	.....	.....	65	385	.....	450	47.1	85	200
Benton	900	.....	.....	150	260	.....	410	45.5	154.5	490
Blackford	470	.5	.....	85	180	[19]	275.5	58.6	175.5	.....
Boone	816	2	.....	555	.....	.....	557	68.2	—178.5	200
Brown	350	.....	.....	.....	33	.....	33	9.4	23	50
Carroll	1,045	.....	3	42	350	.....	395	37.8	80	617
Cass	1,302	.....	.....	200	252	.....	452	34.7	74.5	.....
Clark	694.5	.....	.....	184.5	33	.....	217.5	31.3	121.5	477
Clay	626	.....	3	75	268	.....	346	55.2	33.25	200
Clinton	940	.....	.....	20.93	739.23	.....	760.16	80.8	260.16	179.84
Crawford	420	.....	.....	70	.....	.....	70	16.6	44	50
Daviess	860	.....	.....	100	200	.....	300	34.8	136	300
Dearborn	435	.....	3.14	75	7	.....	85.14	19.5	— 45.11	150
Decatur	600	.....	.....	345.75	.....	.....	345.75	57.6	161.75	150
Dekalb	900	.....	.....	6	21	.....	27	3	—252	173
Delaware	820	.....	2	62.75	351.75	[14]	430.50	51.8	—195	270.50
Dubois	750	.....	.....	85	.....	.....	85	11.3	36.5	400
Elkhart	550	6	7	.....	12	[14]	29	5.2	—266	.....
Fayette	400	.3	.....	10	270	.....	280.3	70.07	9.55	60
Floyd	299.25	.....	17.75	26	3.5	.....	47.25	15.7	— 71.75	252
Fountain	1,200	.....	2.62	54	265	.....	321.62	26.8	— 52.38	450
Franklin	1,000	.....	.....	.....	178.5	.....	178.5	17.85	61.5	.....
Fulton	682	.....	.....	.....	85	.....	85	12.4	— 8.5	282
Gibson	1,350	.....	.....	242	31	.....	273	20.2	148	500
Grant	936	.....	60	200	573	[13]	836	89.3	380.5	.....
Greene	953	1.5	.....	.....	453	.....	454.5	47.6	172.75	.....
Hamilton	1,000	1	.....	.....	700	.....	701	70.1	301	300
Hancock	700	.....	.....	40	500	.....	540	77.1	114	160
Harrison	1,053	.....	.....	133	10	.....	143	13.5	73.5	.....
Hendricks	900	.....	.....	100	230	.....	330	36.6	— 23.5	100
Henry	730	1.25	.....	1.5	450	.....	452.75	62.02	—106.25	150
Howard	616	.....	.....	20	497	.....	517	83.9	230	.....
Huntington	888.5	1.25	.....	50	324.25	.....	375.5	42.2	— 86.5	413
Jackson	812	.5	.....	29.5	547	.....	577	71.05	57.5	.....
Jasper	810	.....	.....	175	35	.....	210	25.9	— 3.25	.....
Jay	664	.....	.....	80	356	.....	436	65.6	55	.....
Jefferson	796.65	.....	.....	191.65	5	.....	196.65	24.6	— 1.85	.....
Jennings	651	.....	.....	251	.....	.....	251	38.5	7	100
Johnson	792	.....	.....	5	295	.....	300	37.8	145	484
Knox	1,181	1	.....	.....	600	.....	601	55.5	206.5	.....
Kosciusko	1,300	.....	.....	.....	16	.....	16	1.2	—338.75	.....
Lagrange	826	.....	.....	.....	.....	.....	.....	.....	—130	799
Lake	1,050	1	28	376	45	.....	450	42.8	334.5	600
Laporte	1,200	.....	1	258.77	2.73	.....	262.5	21.8	152	760
Lawrence	828	.....	.....	304.5	168.75	.....	473.25	57.1	145.75	.....
Madison	900	4.5	.....	.....	800	.....	804.5	89.3	382.5	.....
Marion	881	.....	.....	433	.....	.....	433	49.1	— 92	400
Marshall	882 5	.....	3.5	20.5	58.5	.....	82.5	9.3	— 83	.....
Martin	370	.....	.....	100	.....	.....	100	27.02	64	70
Miami	970.2	.....	.....	6.45	338.75	.....	345.2	35.5	25.2	625
Monroe	865	.....	.....	326	.....	.....	326	37.6	115	300
Montgomery	850	1.5	17.5	30	451	.....	500	58.8	—117.75	.....
Morgan	675	.....	.....	75	199	[11]	274	40.59	23.5	200
Newton	690	.....	.....	302	.....	.....	302	43.7	147	.....
Noble	850	.....	.....	.....	600	.....	600	70.5	380	200
Ohio	227	.....	.....	42	.....	.....	42	18.5	— 23	.....
Orange	700	.....	.....	225	75	.....	300	42.8	58.5	200
Owen	596	.....	.....	190	48	.....	238	39.9	—332	.....
Parke	773	.....	.....	.....	698.1	.....	698.1	90.3	120.1	.....
Perry	800	.....	.....	18.5	.....	.....	18.5	2.3	18.5	431.5
Pike	800	.....	.....	76	4	.....	80	10	44	200
Porter	1,000	.....	.....	273.41	.....	.....	273.41	27.34	109.16	500.31
Posey	662	.....	.....	40	172	.....	212	32.02	63.75	400

[1] Brick.

INDIANA—Continued.

TABLE 12.—*Mileage of public roads outside of incorporated cities and towns, 1914*—Continued.

County.	Total mileage of all roads.	Surfaced roads.								Graded and drained earth.
		Concrete.	Bituminous macadam.	Macadam.	Gravel.	Other hard-surfaced roads.	Total of surfaced roads.	Percentage of roads surfaced.	Increase in surfaced mileage over 1909.	
Pulaski	864	.....	.....	25	292.5	.....	317.5	36.7	224.75	546.5
Putnam	1,200	.....	4	425	421	.....	850	70.8	282	.....
Randolph	1,070	.....	2	2	520	.....	524	48.9	17.5	400
Ripley	442	.....	.....	291	11	.....	302	68.09	160	140
Rush	975	.....	2.5	50	337.5	.....	390	40	91	225
St. Joseph	499	12.5	.....	3	37.5	[2]140	193	38.7	77	75
Scott	300.6	.6	.....	50	100	.....	150.6	50.09	100.1	100
Shelby	837	.5	.....	30	285	.....	315.5	37.6	38.5	197
Spencer	951	.....	.....	48.3	3	.....	51.3	5.3	21.3	300
Starke	650	.....	.....	13.5	289.5	.....	303	46.6	180	428
Steuben	960	.....	.....	25	.....	.....	25	2.6	— 15	.....
Sullivan	974	.....	.09	170	300	.....	470.09	48.2	87.09	.....
Switzerland	448	.....	.....	128	20	[2]10	158	35.3	36	200
Tippecanoe	1,033	.....	3	10	570.39	.....	583.39	56.4	161.14	200
Tipton	656	.....	1.25	50	598.75	.....	650	99.08	228	6.75
Union	280	.....	.....	5	115	.....	120	42.8	10	100
Vanderburg	722	1	.....	183	17	{2.25 / 1.75}	202	27.9	50	520
Vermilion	800	3	.....	2.5	400.5	[1]1	407	50.8	149.5	.....
Vigo	886	2	.....	398	.....	[1]2	402	45.3	83	.....
Wabash	852	.....	.....	109	316	.....	425	49.8	97	427
Warren	610	.....	.....	2.83	373.89	.....	376.72	61.7	73.72	165.38
Warrick	470	.....	.....	70	.....	.....	70	14.8	40	.....
Washington	1,475	.....	.....	225	.....	.....	225	15.2	—395	.....
Wayne	753	3.27	.....	10.45	710	.....	723.72	96.1	581.72	.....
Wells	808	.....	.....	254	486	.....	740	91.5	189	68
White	970	.....	.....	200	170	.....	370	38.1	100	.....
Whitley	634	.....	.....	3	501	.....	504	79.4	254	.....
Total	73,347.20	53.17	168.35	10,291.29	20,264.59	[3]187	30,962.40	42.2	6,006.65	17,509.78

[1] Brick. [2] Sand-clay. [3] Comprising 34.75 miles brick and 150.25 miles sand clay.

IOWA.

TABLE 13.—*Mileage of public roads outside of incorporated cities and towns, 1914.*

County.	Total mileage of all roads.	Surfaced roads.						
		Macadam.	Gravel.	Sand-clay.	Concrete.	Total of surfaced roads.	Percentage of roads surfaced.	Increase in surfaced mileage over 1909.
Adair	1,162	.....	.....	.....	.....	.....	.....	.....
Adams	845	.....	.....	.....	.....	.....	.....	.....
Allamakee	1,052	2	.....	.....	.....	2	.19	— 3.5
Appanoose	1,276	.....	.....	.....	.....	.....	.....	.....
Audubon	909	.....	.....	.....	.....	.....	.....	.....
Benton	1,450	.3	.....	1	.8	2.1	.14	— 11.9
Black Hawk	1,216	2	.....	.....	.....	2	.16	— 52.5
Boone	1,068	.....	2	.....	.....	2	.18	— 69.75
Bremer	923	3	.....	.....	.....	3	.32	— 90.75
Buchanan	1,122	.....	12	.....	.....	12	1.06	— 90.25
Buena Vista	1,182	.....	10	.....	.....	10	.84	— 42.5
Butler	1,177	.....	.....	.....	.....	.....	.....	— 95
Calhoun	1,195	.....	10	.....	.....	10	.83	— 30
Carroll	1,210	.....	20	.....	.....	20	1.65	— 56
Cass	1,116	.....	.....	.....	.....	.....	.....	.....
Cedar	1,073	.....	.....	.....	.....	.....	.....	— 5
Cerro Gordo	1,212	.....	5	.....	2	7	.57	— 17.5
Cherokee	1,198	.....	12	.....	.....	12	1.001	— 8
Chickasaw	1,002	.....	.....	2	.....	2	.19	— 65
Clarke	757	.....	.....	.....	.....	.....	.....	.....
Clay	1,145	.....	.....	.....	.....	.....	.....	— 24
Clayton	1,438	3	.....	.....	.....	3	.208	— 71.5
Clinton	1,317	10	10.5	.....	.1	20.6	1.56	— 41.65
Crawford	1,390	.....	5	.....	.....	5	.35	4.75
Dallas	1,123	.....	8	.....	.....	8	.71	— 4
Davis	1,021	.....	.....	.....	.....	.....	.....	.....
Decatur	985	.....	.....	.....	.....	.....	.....	.....
Delaware	1,139	7	20	6	.....	33	2.89	— 6
Des Moines	806	.....	.....	.....	1	1	.12	— 52
Dickinson	681	.....	10	.....	.....	10	1.46	— 30
Dubuque	1,076	10	25	.....	.....	35	3.25	— 59.85
Emmet	736	.....	16	.....	.....	16	2.17	14.5
Fayette	1,412	.....	.....	7	.....	7	.49	— 70.5
Floyd	1,060	.....	.....	.....	.....	.....	.....	— 55
Franklin	1,213	.....	.....	.....	.....	.....	.....	— 37
Fremont	925	.....	.....	.....	.....	.....	.....	.....
Greene	1,021	.....	30	.....	.....	30	2.93	—121.5
Grundy	1,003	.....	.....	.....	.....	.....	.....	.....
Guthrie	1,346	.....	6	.....	.....	6	.44	— 7.5
Hamilton	1,149	.....	10	.....	.....	10	.87	— 15
Hancock	1,027	.....	.....	.....	.....	.....	.....	—114.5
Hardin	1,183	.....	3	.....	.....	3	.25	—105.5
Harrison	1,211	.....	.....	.....	.....	.....	.....	— 4
Henry	848	.....	.....	.....	.....	.....	.....	.....
Howard	851	.....	.....	.....	.....	.....	.....	— 31.5
Humboldt	841	.....	11	.....	.....	11	1.3	— 21
Ida	888	.....	.....	.....	.....	.....	.....	.....
Iowa	1,212	.....	4	2	.....	6	.49	— 11.5
Jackson	1,242	.....	.....	.....	.....	.....	.....	— 12.5
Jasper	1,490	.....	.....	.....	.....	.....	.....	— 17
Jefferson	890	.....	.....	.....	.....	.....	.....	— 3
Johnson	1,073	.....	.....	.....	.....	.....	.....	— 8.75
Jones	1,193	.....	.....	.....	.....	.....	.....	— 10
Keokuk	1,232	8	.....	.....	.....	8	.64	—102
Kossuth	1,905	.....	5	.....	.....	5	.26	— 5
Lee	1,042	17	2	.....	.....	19	1.81	4
Linn	1,550	25	22	5	.....	52	3.35	17.5
Louisa	714	.....	.....	.....	1.37	1.37	.19	1.37
Lucas	875	.....	.....	.....	.....	.....	.....	.....
Lyon	1,291	.....	.....	.....	.....	.....	.....	.....
Madison	1,198	.....	.....	.....	.....	.....	.....	.....
Mahaska	1,140	.....	.....	.....	.....	.....	.....	— 3
Marion	1,155	.....	.....	.....	.....	.....	.....	.....
Marshall	1,275	.....	2	.....	.....	2	.15	1
Mills	824	.....	.....	.....	.....	.....	.....	.....
Mitchell	924	.....	20	.....	.....	20	2.16	13
Monona	1,268	.....	.....	.....	.....	.....	.....	— .5
Monroe	1,048	.....	.....	.....	.....	.....	.....	.....
Montgomery	843	.....	.....	.....	.....	.....	.....	.....
Muscatine	899	.....	11	.....	.5	11.5	1.27	— 37
O'Brien	1,204	.....	.....	.....	.....	.....	.....	— 4.5

IOWA—Continued.

TABLE 13.—*Mileage of public roads outside of incorporated cities and towns, 1914*—Contd.

County.	Total mileage of all roads.	Surfaced roads.						
		Macadam.	Gravel.	Sand-clay.	Concrete.	Total of surfaced roads.	Percentage of roads surfaced.	Increase in surfaced mileage over 1909.
Osceola	856	.....	6	.....	.....	6	.7	2
Page	1,158	.....	.....	.....	.....	.....	.....	.....
Palo Alto	1,018	.....	5	.....	.....	5	.49	2.75
Plymouth	1,625	.....	.....	.....	.....	.....	.....	.....
Pocahontas	1,240	.....	8	.....	.....	8	.64	6
Polk	1,652	.....	10	.....	.....	10	.605	— 9.5
Pottawattamie	1,950	.....	.....	.....	.....	.....	.....	— 10
Poweshiek	1,202	.....	.....	.....	.....	.....	.....	.....
Ringgold	1,219	.....	.....	.....	.....	.....	.....	.....
Sac	1,187	.....	25	.....	.....	25	2.1	14.5
Scott	1,061	80	5	.....	.....	85	8.01	29.75
Shelby	1,142	.....	.....	.....	.....	.....	.....	.....
Sioux	1,594	.....	.....	.....	.....	.....	.....	— 10
Story	1,201	.....	50	.....	.....	50	4.16	— 76
Tama	1,407	.....	.....	.....	.....	.....	.....	— 9.25
Taylor	1,194	.....	.....	.....	.....	.....	.....	.....
Union	974	.....	.....	.....	.....	.....	.....	.....
Van Buren	933	.....	.....	.....	.....	.....	.....	.....
Wapello	965	.....	.....	.....	.....	.....	.....	— 7
Warren	1,210	.....	.....	.....	.....	.....	.....	.....
Washington	1,147	.....	.....	.....	.....	.....	.....	.....
Wayne	1,119	.....	.....	.....	.....	.....	.....	.....
Webster	1,351	.....	.....	.....	.....	.....	.....	— 29
Winnebago	864	.....	4	.....	.....	4	.45	— 57.5
Winneshiek	1,354	4	.....	.....	.....	4	.29	— 24
Woodbury	1,470	.....	10	.....	.....	10	.68	9.5
Worth	742	.....	.....	.....	.....	.....	.....	— 36.5
Wright	1,194	.....	.....	.....	.....	.....	.....	— 22.5
Total	112,496							
City streets	8,422							
Country roads	104,074	171.3	[1] 414.5	23	5.77	614.57	.59	—1,890.53

[1] Includes 1.5 miles of shell, of which 0.5 of a mile is in Clinton County and 1 mile in Muscatine County.

KANSAS.

TABLE 14.—*Mileage of public roads outside of incorporated cities and towns, 1914.*

County.	Total mileage of all roads.	Surfaced roads.						
		Macadam.	Gravel.	Sand-clay.	Other hard-surfaced roads.	Total of surfaced roads.	Percentage of roads surfaced.	Increase in surfaced mileage over 1909.
Allen	800	33			[1] .75	33.75	4.21	22.75
Anderson	1,125	1	.5		[2] 2	3.5	.31	2.5
Atchison	810	5			[3] .5	5.5	.67	—4.5
Barber	900							
Barton	1,225				[3] 10	10	.81	10
Bourbon	1,332	35				35	2.62	10.25
Brown	700							
Butler	2,377							
Chase	1,100							
Chautauqua	1,000		2			2	.2	2
Cherokee	960		60			60	6.25	40
Cheyenne	600			20		20	3.33	19.5
Clark	658			10		10	1.51	3
Clay	1,337			2		2	.14	2
Cloud	1,360			1		1	.07	1
Coffey	1,296		3		[4] 1.5	4.5	.34	4.5
Comanche	637							— 2
Cowley	1,925							— .75
Crawford	1,150		4			4	.33	4
Decatur	1,464							
Dickinson	1,656		3	10		13	.78	1
Doniphan	707	1.5				1.5	.21	0
Douglas	1,000	4				4	.4	0
Edwards	878			71		71	8.08	31
Elk	1,000	1	3			4	.4	—27
Ellis	1,114							
Ellsworth	942							
Finney	875			8	[4] 2	10	1.14	1
Ford	1,507			9		9	.59	4
Franklin	1,152	.25	2			2.25	.19	.8
Geary	500	5				5	1	2.5
Gove	234							
Graham	1,309							
Grant	1,200			25		25	2.08	25
Gray	600			10		10	1.66	0
Greeley	225							
Greenwood	1,843							
Hamilton	125			5.5		5.5	4.4	0
Harper	614			20		20	3.24	20
Harvey	1,128			12		12	1.06	12
Haskell	500							
Hodgeman	500							
Jackson	1,196							
Jefferson	1,100	.5	.75			1.25	.11	1.25
Jewell	1,766							
Johnson	1,015	22			[4] 3	25	2.46	20
Kearny	478			5		5	1.04	5
Kingman	1,612			60		60	3.72	59.25
Kiowa	739							
Labette	600							— 1
Lane	263							
Leavenworth	850	2			[3] 3	5	.59	0
Lincoln	960		5			5	.52	5
Linn	920							
Logan	357							
Lyon	1,760	5	5			10	.56	3
McPherson	1,653							
Marion	1,986							
Marshall	1,685							
Meade	599							
Miami	1,210							
Mitchell	1,320							
Montgomery	1,200							
Morris	800							
Morton	150			9		9	6	9
Nemaha	1,455							
Neosho	1,160	6				6	.56	.95
Ness	455							
Norton	1,531			.25	[2] 5	5.25	.34	5.25

[1] Concrete. [2] Shale. [3] Brick. [4] Oiled earth.

KANSAS—Continued.

TABLE 14.—*Mileage of public roads outside of incorporated cities and towns, 1914*—Contd.

County.	Total mileage of all roads.	Surfaced roads.						
		Macadam.	Gravel.	Sand-clay.	Other hard-surfaced roads.	Total of surfaced roads.	Percentage of roads surfaced.	Increase in surfaced mileage over 1909.
Osage	1,368							
Osborne	1,650	5				5	0.303	5
Ottawa	1,304			50		50	3.83	50
Pawnee	1,424			10		10	.7	−15
Phillips	1,823							
Pottawatomie	1,600	6	12			18	1.12	−21
Pratt	1,000							
Rawlins	270							
Reno	2,404			125		125	5.19	120
Republic	700			2		2	.28	.5
Rice	1,350			100	[1] 2	102	7.55	102
Riley	1,100		.6	1.25	[2] .6	2.45	.22	2.45
Rooks	1,608			2		2	.12	2
Rush	1,358							
Russell	1,350							
Saline	1,525				[1] 2.6	2.6	.17	2.6
Scott	290							
Sedgwick	2,390		1	31	[1] 5	37	1.54	37
Seward	296			9		9	3.04	3
Shawnee	1,096	5.75	46.5		([3])	57.5	5.24	57.5
Sheridan	1,400				5.25			
Sherman	180							
Smith	1,820							
Stafford	1,500			150		150	10	134
Stanton	303							
Stevens	230							
Sumner	1,115							
Thomas	137							
Trego	1,000							
Wabaunsee	1,500	1	.5	.5		2	.13	.5
Wallace	98							
Washington	1,800							
Wichita	608							
Wilson	1,000		3			3	.3	3
Woodson	1,004							
Wyandotte	266	55.3			[1] 1	56.3	21.16	− 1.7
	111,052	194.3	151.85	758.5	44.2	1,148.85	1.03	774.14

[1] Oiled earth. [2] Concrete. [3] Cinders, 1.25; brick, 0.6; oiled earth, 3.4.

MICHIGAN.

TABLE 15.—*Mileage of public roads outside of incorporated cities and towns, 1914.*

County.	Total mileage of all roads.	Surfaced roads.								Graded and drained earth.
		Concrete.	Bituminous macadam.	Macadam.	Gravel.	Sand-clay.	Total of surfaced roads.	Percentage of roads surfaced.	Increase in surfaced mileage over 1909.	
Alcona	485.85	.....	.....	.....	4	35	39	8.01	14	40
Alger	332	.....	.....	11.05	44	19	74.05	22.3	39.32	29
Allegan	1,767.2	.....	.....	4.61	81.05	27	112.66	6.37	—250.34	.....
Alpena	591.3	.....	.....	110	48	15	173	29.25	— 22.5	36
Antrim	832.5	.....	.....	5.29	88.2	14	107.49	12.9	54.16	.....
Arenac	601.4	.....	.....	.....	22.03	12	34.03	5.65	29.03	60
Baraga	383.6	.....	.....	.....	10	65	75	19.55	7.75	.....
Barry	1,141.1	.....	.....	.....	240.9	150	390.9	34.25	361.9	.....
Bay	972.2	2.16	10	151.2	14.2	25	202.56	20.83	29.56	35
Benzie	560.2	.....	.....	.75	110.5	1.5	112.75	20.12	75	.....
Berrien	1,198.1	.89	30	35.43	81.14	.25	147.71	12.32	— 1.04	.....
Branch	926.6	.....	.....	1	60.25	30	91.25	9.84	70.5	50
Calhoun	1,233.5	.....	2	11.25	130.5	11	154.75	12.54	140.9	25
Cass	964.3	.....	.....	.....	74.56	16	90.56	9.39	40.89	14
Charlevoix	663	.....	2	8.8	46.5	20	77.3	11.65	3.3	36
Cheboygan	814.6	.....	.....	15.16	30.2	68	113.36	13.91	15.86	17
Chippewa	218.6	.....	.....	4	93	60	157	71.82	—136.75	40
Clare	811	.....	.....	.....	37.75	1	38.75	4.77	33.5	7
Clinton	1,206	.....	.....	.....	62.37	6.5	68.87	5.71	3.37	16
Crawford	480.3	.....	.....	1	26.23	4.98	32.21	6.7	24.71	.....
Delta	820.1	.....	.....	52.22	88	10	150.22	18.31	26.97	30
Dickinson	416	.....	2	15.57	11	56	84.57	20.32	25.21	14
Eaton	1,140.9	.....	.....	.....	115	20	135	11.83	95	44
Emmet	702.3	.....	.....	12.25	30.56	24	66.81	9.51	22.81	13
Genesee	1,297.8	.....	.....	23.5	181.46	7.68	212.64	16.38	156.64	29
Gladwin	604.1	.....	.....	.....	20	10	30	4.96	— 6.5	40
Gogebic	254.5	.....	.....	3.06	13.57	65	81.63	32.07	6.63	50
Grand Traverse	780.6	.....	1	.81	67	5.92	74.73	9.57	22.48	5
Gratiot	1,299.7	.....	.....	.....	172.46	22.18	194.64	14.97	10.14	70
Hillsdale	1,211.9	.....	1	9.73	48.02	16	74.75	6.16	— 13.75	8
Houghton	279.5	.....	6	18.21	43.11	18	85.32	30.52	— 23.18	7
Huron	1,670.5	2.07	.5	33.68	83.79	3.69	123.73	7.4	104.93	40
Ingham	1,167.5	.....	.....	2	50.36	.5	52.86	4.52	— 20.47	13
Ionia	1,243.2	.....	.....	.....	116.27	15	131.27	10.55	53.52	14
Iosco	512.4	.....	.....	5.36	10.5	5.5	21.36	4.16	17.86	7
Iron	841.5	.....	.....	7.06	149.9	27	183.96	21.86	14.96	25
Isabella	1,098	.....	.....	.....	76.8	17	93.8	8.53	60.8	8
Jackson	1,261	.....	.....	4.5	60.88	2.19	67.57	5.35	12.57	9
Kalamazoo	1,087	1.18	4	17.64	102.18	2.75	127.75	11.75	60.75	11
Kalkaska	608	.....	.....	8.78	49.6	3.41	61.79	10.16	25.04	.....
Kent	1,694	1.5	1	3	270.17	7	282.67	16.68	72.17	19
Keweenaw	261	.....	.....	5	147	17	169	64.75	72.5	.....
Lake	607	.....	.....	.....	34.37	21	55.37	9.12	46.37	.....
Lapeer	1,203	.....	.....	4	93.24	1	98.24	8.16	82.24	27
Leelanau	516	.....	.....	2	36.75	16	54.75	10.61	2.25	.....
Lenawee	1,498	.....	.....	7	64.02	11.01	82.03	5.47	— 30.97	.....
Livingston	987	.....	.....	.....	140.68	7	147.68	14.96	92.76	17
Luce	205.4	.....	.....	1	21	11	33	16.06	— 20.5	9
Mackinac	485.1	.....	.....	2	23	11	36	7.42	—178.65	19
Macomb	903	.....	2	3.57	43.07	14	62.64	6.93	12.64	29
Manistee	689	.....	3	5.34	91.8	1.12	101.26	14.69	7.26	16
Marquette	672	.....	4	14.47	26.92	31	76.39	11.36	2.14	40
Mason	684	.....	3	14.47	75.35	11.5	104.32	15.25	58.82	19
Mecosta	1,099	.....	.....	.....	104.32	16	120.32	10.94	95.32	13
Menominee	597	.....	2	8.4	59.34	11	80.74	13.52	— 99.01	29
Midland	663	.....	.....	5.98	35.95	21	62.93	9.49	43.43	34
Missaukee	406	.....	.....	1.06	57.78	24	82.84	20.4	62.09	13
Monroe	1,119	.....	3	38.44	6	3	50.44	4.5	39.84	44
Montcalm	1,570.5	.....	.....	2	109.55	3.08	114.63	7.29	— 35.87	.....
Montmorency	273	.....	.....	.....	11	5	16	5.86	— 11	.....
Muskegon	1,041	.....	4	43.18	35.95	3.04	86.17	8.27	— 7.33	24
Newaygo	1,294	.....	.....	8.74	65.93	14	88.67	6.83	44.17	7
Oakland	1,676	4	2	4.11	68.87	24	102.98	6.14	— 33.93	27
Oceana	954	.....	.....	51.42	36.05	19	106.47	11.16	51.58	14
Ogemaw	608	.....	.....	.....	35.55	11	46.55	7.65	27.55	17
Ontonagon	760	.....	.....	7.56	19	4	30.56	4.02	—256.94	30
Osceola	851	.....	.....	5.47	65.46	10	80.93	9.5	13.93	23
Oscoda	205	.....	.....	.....	17	5	22	10.73	7.75	.....
Otsego	447	.....	.....	.....	17	17	34	7.6	5.75	.....
Ottawa	1,206	2	2	1	40.96	14	59.96	4.97	— .29	36

MICHIGAN—Continued.

TABLE 15.—*Mileage of public roads outside of incorporated cities and towns, 1914*—Continued.

County.	Total mileage of all roads.	Surfaced roads.								Graded and drained earth.
		Concrete.	Bituminous macadam.	Macadam.	Gravel.	Sand-clay.	Total of surfaced roads.	Percentage of roads surfaced.	Increase in surfaced mileage over 1909.	
Presque Isle	580	.....	.....	.....	22.89	6	28.89	4.98	— 26.11	10
Roscommon	240	.....	.....	2	25.5	9	36.5	15.2	13.75	.....
Saginaw	1,574	.....	3	129.6	38.84	12.03	183.47	11.65	— 30.03	40
Sanilac	1,447	.....	.....	10	41.43	9	60.43	4.17	16.43	34
Schoolcraft	997	.....	.....	12	15	3	30	3	— 71.75	13
Shiawassee	1,788	.....	.....	3	75.95	3.4	82.35	4.6	— 4.15	15
Saint Clair	307	.5	3	21.69	20.75	7	52.94	17.24	37.94	17
Saint Joseph	987	.....	.....	2	33.15	2	37.15	3.76	— 38.85	.....
Tuscola	1,745	.....	.....	3.75	104.25	10	118	6.76	6.75	31
Van Buren	1,297	.....	.....	10	41.05	2.04	53.09	4.09	—368.66	.....
Washtenaw	1,286	.....	.....	.....	32.55	29	61.55	4.78	— 69.45	.....
Wayne	1,385	[1]91	4	9	34.03	2	140.03	10.11	93.53	15
Wexford	903	2	.....	5.03	95.94	4	106.97	11.84	16.97	.....
Total	74,189.85	107.3	94.5	1,021.19	5,230.25	1,375.27	7,828.51	10.55	927.97	1,523

[1] This includes one-half mile of brick-paved road.

MINNESOTA.

TABLE 16.—*Mileage of public roads outside of incorporated cities and towns, 1914.*

County.	Total mileage of all roads.	Surfaced roads.						Graded and drained earth.
		Macadam.	Gravel.	Sand-clay.	Total of surfaced roads.	Percentage of roads surfaced.	Increase in surfaced mileage over 1909.	
Aitkin	1,079	.....	4	25	29	2.68	19	250
Anoka	664	.....	45	35	80	12.04	— 17	225
Becker	1,486	.....	.....	.....	.....	.....	— 20	15
Beltrami	1,758	.....	.....	13.08	13.08	.74	13.08	1,093
Benton	592	0.75	31.25	.....	32	5.4	— 14	80
Bigstone	837	.....	2	.....	2	.23	2	62
Blue Earth	1,520	[1]1	[1]40	.....	41	2.69	.....	143
Brown	971	.....	18	.....	18	1.85	— 94	21
Carlton	792	.....	24	15	39	4.92	— 40	175
Carver	600	.....	45	.....	45	7.5	— 5	20
Cass	1,307	.....	.....	47	47	3.51	47	60
Chippewa	960	.....	10	30	40	3.22	40	50
Chisago	535	1	25	2	28	5.23	— 12	227
Clay	1,775	.....	3.75	.....	3.75	.21	—135.25	900
Clearwater	820	.....	.....	2	2	.24	2	40
Cook	295	.....	.....	.....	.....	.....	—120	55
Cottonwood	1,260	.....	12	.....	12	.95	— 38	28
Crow Wing	628	.....	20	3	23	3.66	— 67	20
Dakota	945	.....	49	5	54	5.71	—106	400
Dodge	810	.....	7	.....	7	.86	—203	84
Douglas	1,005	.....	.....	50	50	4.97	—125	100
Faribault	1,200	.....	20	50	70	5.83	21	100
Fillmore	1,008	[2]2.5	5	.....	7.5	.74	7.5	50
Freeborn	1,150	.....	10	.....	10	.86	— 17	14
Goodhue	1,095	.....	19.5	1.25	20.75	1.89	— 48.25	32
Grant	924	.....	4	.....	4	.43	2.5	60
Hennepin	1,000	[1]37	[1]80.5	.....	117.5	11.75	.....	193
Houston	540	[3]5.75	.....	3	8.75	1.62	— 3.25	74
Hubbard	1,200	.....	.....	71	71	5.91	70.5	.....
Isanti	792	1.25	14.25	.....	15.5	1.95	15.5	54
Itasca	952	[4]7	20	25	52	5.46	27	400
Jackson	1,254	.....	20	.....	20	1.51	20	100

[1] From 1909 report.
[2] Includes 0.5 of a mile of concrete.
[3] Includes 0.75 of a mile of concrete.
[4] Includes 6 miles of bituminous macadam.

MINNESOTA—Continued.

TABLE 16.—*Mileage of public roads outside of incorporated cities and towns, 1914*—Contd.

County.	Total mileage of all roads.	Surfaced roads.						Graded and drained earth.
		Macadam.	Gravel.	Sand-clay.	Total of surfaced roads.	Percentage of roads surfaced.	Increase in surfaced mileage over 1909.	
Kanabec	600	.....	.....	2	2	.33	2	18
Kandiyohi	1,210	.....	20	160	180	14.87	— 34	300
Kittson	1,440	.....	2	48	50	3.47	50	300
Koochiching	630	.....	.....	.....	.....	.....	.....	180
Lac qui Parle	1,435	.....	12	.....	12	.82	— 24	30
Lake	350	6	50	.....	56	16	36	200
Le Sueur	730	.....	15	1	16	2.19	— 20	50
Lincoln	984	.....	9	16	25	2.54	20	42
Lyon	1,413	.....	.....	.....	.....	.....	— 51	75
McLeod	794	.....	150	.....	150	18.89	—250	463.5
Mahnomen	244	.....	.....	.....	.....	.....	.....	33
Marshall	1,200	.....	.....	.....	.....	.....	— 94	120
Martin	1,290	.....	60	.....	60	4.65	— 40	30
Meeker	1,200	1.5	100	200	301.5	25.12	285.5	200
Mille Lacs	655	[1] 2	[1] 31	[1] 15	48	7.32	.....	138
Morrison	1,600	.75	.....	12	12.75	.79	—448	200
Mower	1,440	.....	.....	40	40	2.77	33	100
Murray	1,200	.....	.....	.....	.....	.....	— 15	40
Nicollet	616	.....	178	.....	178	28.89	73	330
Nobles	1,380	.....	2	.....	2	.14	2	18
Norman	1,632	.....	25	.....	25	1.53	25	150
Olmsted	1,090	6	32	.....	38	3.48	—262	150
Otter Tail	3,000	.....	10	10	20	.66	—118	100
Pennington	1,107	.....	23	.....	23	2.07	23	7
Pine	1,275	.....	3.5	.....	3.5	.27	— 6.5	22
Pipestone	860	.....	.....	1	1	.11	— 10	32
Polk	2,893	.....	33	.....	33	1.14	—200	1,200
Pope	1,150	.....	11	.....	11	.95	— 14	11
Ramsey	211	[2] 51.5	98	.....	149.5	70.85	95.9	17
Red Lake	725	.....	6.5	.....	6.5	.89	— 53.5	13
Redwood	1,600	.....	60	.....	60	3.75	— 44	100
Renville	1,648	.....	38	.....	38	2.30	— 59	520
Rice	980	.....	260	10	270	27.5	136	30
Rock	930	.....	13	.....	13	1.39	13	.....
Roseau	2,000	.....	3	.....	3	.15	— 48	839
St. Louis	3,000	.....	400	.....	400	13.33	275	2,309
Scott	560	.....	29	.....	29	5.17	9	12
Sherburne	750	2	30	40	72	9.60	61	300
Sibley	735	.....	70	.....	70	9.52	30.5	60
Stearns	2,000	.....	100	.....	100	5	49.5	125
Steele	711	[3] .25	155	.....	155.25	21.83	25.25	100
Stevens	800	.....	.....	.....	.....	.....	— 10	50
Swift	800	.....	25	10	35	4.37	— 43	100
Todd	1,355	.5	.....	20	20.5	1.51	— .50	150
Traverse	998	.....	7	.....	7	.7	7	60
Wabasha	847	.....	15	10	25	2.95	— 5	225
Wadena	678	.....	1	.....	1	.14	.....	100
Waseca	711	.....	25	.....	25	3.51	4	52
Washington	674	.....	65	1	66	9.79	65	8
Watonwan	600	.....	.....	7	7	1.16	— 53	40
Wilkin	1,186	.....	.....	.....	.....	.....	.....	87
Winona	1,000	[4] 30.5	5	.....	35.5	3.55	3.5	200
Wright	1,105	.....	100	5	105	9.50	— 35	200
Yellow Medicine	1,740	.....	24	.....	24	1.37	— 58	16
Total	93,517	[5] 157.25	2,825.25	985.33	3,967.83	4.24	—1,449.02	15,377.5

[1] From 1909 report.
[2] Includes 13 miles of bituminous macadam.
[3] Includes 0.25 of a mile of concrete.
[4] Includes 16 miles of concrete and 0.5 of a mile of brick.
[5] Includes 17.5 miles of concrete, 19 miles bituminous macadam and 0.5 of a mile of brick

MISSOURI.

TABLE 17.—*Mileage of public roads outside of incorporated cities and towns, 1914.*

County.	Total mileage of all roads.	Surfaced roads.							Graded and drained earth.
		Bituminous macadam.	Macadam.	Gravel.	Sand-clay.	Total of surfaced roads.	Percentage of roads surfaced.	Increase in surfaced mileage over 1909.	
Adair	1,200								1,100
Andrew	755		.5			.5	.06	— .5	400
Atchison	1,012								800
Audrain	1,148		5			5	.43	5	
Barry	900							— 33	600
Barton	850			7		7	.82	2	
Bates	1,363			3	110	113	8.29	113	1,000
Benton	952.75			77.75		77.75	8.16	69.75	475
Bollinger	308			8	10	18	5.82	14	50
Boone	1,458	4	4	50		58	3.97	—1	1,000
Buchanan	970.75	.75	30			30.75	3.16	12.75	100
Butler	615			15		15	2.43	13	500
Caldwell	800.5		.5			.5	.06	.5	
Callaway	1,420		7	43		50	3.52	25	50
Camden	700								50
Cape Girardeau	850		14	160		174	21.64	—12	500
Carroll	800							— .5	300
Carter	140			5		5	3.57	5	
Cass	1,323		6			6	.45	— 2	800
Cedar	900			5		5	.55	5	
Chariton	1,350								
Christian	820			20	100	120	14.63	120	100
Clark	1,500								
Clay	706.5							— 2.5	513.25
Clinton	470								400
Cole	540.5		37.05	157		194.05	35.9	12.55	42.94
Cooper	900			3	100	103	11.44	101	600
Crawford	325		5	20	50	75	23.07	75	50
Dade	975			47		47	4.82	47	700
Dallas	925			11.25		11.25	1.21	11.25	340
Daviess	263		3			3	1.14	1	160
Dekalb	400								200
Dent	375							— 5	100
Douglas	1,200								14
Dunklin	400							— 5	
Franklin	1,600	4	35	200		239	14.93	—61	50
Gasconade	260		30	80		110	42.3	—171	120
Gentry	902								853
Greene	1,464	2	90.5	43		135.5	9.25	39	1,053.5
Grundy	600								250
Harrison	300	.5		[1] 3		3.5	1.16	3.5	296.5
Henry	1,050								500
Hickory	510			50	60	110	21.56	105	100
Holt	750				175	175	23.33	175	400
Howard	668								92.9
Howell	1,000								300
Iron	300			45	20	65	21.66	25	85
Jackson	1,100		250			250	22.72	32	95
Jasper	298.5		25.5	101		126.5	42.37	—427.5	52
Jefferson	1,172		150	230		380	32.42	240	380
Johnson	1,494	.5	2			2.5	.16	1	200
Knox	730								690
Laclede	1,200							— 5	100
Lafayette	1,040	.75	20			20.75	1.99	20.75	1,018
Lawrence	2,172		132		400	532	24.49	474	1,350
Lewis	830			24	6	30	3.61		200
Lincoln	1,219		15.5	152		167.5	13.74	119.5	
Linn	1,000								700
Livingston	850							— 2	243.2
McDonald	1,340				40	40	2.97	40	100
Macon	2,000							— 2	
Madison	854			10		10	1.17		
Maries	1,000			100		100	10	100	
Marion	800	15	35	75		125	15.62	—110	275
Mercer	1,100								
Miller	1,897			25	25	50	2.63	50	275
Mississippi	360.25				1.25	1.25	.34	.25	200
Moniteau	450			50		50	11.11	—100	
Monroe	1,000			50		50	5	—120	700

[1] 1 mile brick and 2 miles concrete.

MISSOURI—Continued.

TABLE 17.—*Mileage of public roads outside of incorporated cities and towns, 1914*—Continued.

County.	Total mileage of all roads.	Surfaced roads.							Graded and drained earth.
		Bituminous macadam.	Macadam.	Gravel.	Sand-clay.	Total of surfaced roads.	Percentage of roads surfaced.	Increase in surfaced mileage over 1909.	
Montgomery	780	.....	.....	30	.....	30	3.84	24	300
Morgan	400	.....	.....	50	.....	50	12.5	— 25	300
New Madrid	426	.....	.....	2	10	12	2.81	12	100
Newton	800	.....	.....	175	.....	175	21.87	75	625
Nodaway	1,500	.....	.....	.....	.....	.....	.....	.....	1,500
Oregon	700	.....	.....	120	.....	120	17.14	120	80
Osage	800	.....	10	125	200	335	41.87	235	150
Ozark	773	.....	.....	.....	.....	.....	.....	.....	100
Pemiscot	173	.....	8	.....	.....	8	4.62	5.25	100
Perry	784	.....	18	100	.....	118	15.05	— 57	500
Pettis	1,225	10	60	90	.....	160	13.06	102.5	800
Phelps	830	.....	.....	30	.....	30	3.61	30	325
Pike	1,050	.....	3	198	.....	201	19.14	65.5	.....
Platte	700	.....	1	.....	.....	1	.14	1	.....
Polk	800	.....	.....	20	20	40	5	40	100
Pulaski	350	.....	.....	.....	.....	.....	.....	— 20	6
Putnam	800	.....	.....	.....	.....	.....	.....	.....	400
Ralls	735	.....	.....	70	.....	70	9.52	—130	350
Randolph	650	18	.....	.....	.....	18	2.76	16	350
Ray	1,000	.....	.....	.....	.....	.....	.....	.....	100
Reynolds	88	.....	.....	3	.....	3	3.40	3	10
Ripley	1,080	.....	.....	.....	.....	.....	.....	.....	40
St. Charles	940	.....	25	130	5	160	17.02	— 10	750
St. Clair	419	.....	.....	4	15	19	4.53	19	100
Ste. Genevieve	500	.....	50	100	20	170	34	65	280
St. Francois	500	2	58	90	.....	150	30	112	200
St. Louis	1,100.77	.....	375	125	[1].77	500.77	45.49	74.77	600
Saline	1,200.5	.5	.....	.....	.....	.5	.04	.5	800
Schuyler	600	.....	.....	.....	.....	.....	.....	.....	.....
Scotland	800	.....	.....	.....	.....	.....	.....	.....	800
Scott	560.5	.5	15.5	15.5	25	56.5	10.08	50.25	200
Shannon	850	.....	.....	100	.....	100	11.76	100	550
Shelby	705	.....	.....	20	.....	20	2.83	.....	.....
Stoddard	1,200	.....	.....	40	.....	40	3.33	30	.....
Stone	467	.....	.....	7	.....	7	1.49	7	50
Sullivan	1,122	.....	.....	.....	.....	.....	.....	.....	.....
Taney	500	.....	.....	.....	.....	.....	.....	.....	4
Texas	605	.....	.....	5	50	55	9.09	55	50
Vernon	1,514.25	.5	.....	[2]5	.....	5.5	.36	5.5	1,451.75
Warren	507	.....	.....	35	.....	35	6.9	— 56	128
Washington	275	.....	.....	50	.....	50	18.18	— 35	100
Wayne	320	.....	.....	20	.....	20	6.25	.....	.....
Webster	800	.....	10	50	.....	60	7.5	54	300
Worth	442	.....	.....	.....	.....	.....	.....	.....	382
Wright	742	.....	.....	.....	.....	.....	.....	— 10	100
Total	96,040.77	59	1,531.05	3,679.50	1,443.02	6,712.57	6.98	1,957.07	34,706.04

[1] Concrete, 0.77 mile. [2] Cinders, 5 miles.

MONTANA.

TABLE 18.—*Mileage of public roads outside of incorporated cities and towns, 1914.*

County.	Total mileage of all roads.	Surfaced roads.						Graded and drained earth.
		Macadam.	Gravel.	Other hard-surfaced roads.	Total of surfaced roads.	Percentage of roads surfaced.	Increase in surfaced mileage over 1909.	
Beaverhead	1,033	.....	.....	.....	.....	.....	.....	100
Big Horn	352	.....	.....	.....	.....	.....	.....	171
Blaine	1,248	.....	.....	.....	.....	.....	.....	220
Broadwater	482	.....	2	.....	2	.41	2	80
Carbon	812	.....	4	[1] 12	16	1.97	16	110
Cascade	1,427	.5	.....	.....	.5	.03	.5	54
Chouteau	2,400	.....	.....	[1] 2	.....	.....	.....	400
Custer	2,116	.....	12	[2] 3	17	.80	17	490
Dawson	2,530	.....	30	.....	30	1.18	20	100
Deer Lodge	175	75	.....	.....	75	42.85	61	100
Fallon	518	.....	.....	.....	.....	.....	.....	300
Fergus	4,280	.....	5	.....	5	.11	.5	275
Flathead	1,621	2	220	.....	222	13.69	222	224
Gallatin	943	.5	.25	.....	.75	.07	.25	375.55
Granite	250	.....	.....	.....	.....	.....	.....	50
Hill	1,000	.....	.....	.....	.....	.....	.....	125
Jefferson	357	.....	.....	.....	.....	.....	.....	157
Lewis and Clarke	1,144	.....	100	.....	100	11.44	80	250
Lincoln	520	.....	10	.....	10	1.92	10	200
Madison	1,280	.....	.....	.....	.....	.....	— 25	250
Meagher	950	.....	.....	.....	.....	.....	.....	60
Mineral	135	.....	.....	.....	.....	.....	.....	85
Missoula	766	.....	65	.....	65	8.48	55	305
Musselshell	866	.....	6	.....	6	.69	6	60
Park	500	.....	.....	.....	.....	.....	.....	125
Phillips	1,000	.....	2.5	.....	2.5	.25	2.5	147.5
Prairie	908	.....	8	.....	8	.88	8	24
Powell	500	.....	.....	.....	.....	.....	.....	80
Ravalli	720	.....	20	.....	20	2.77	10	100
Richland	625	.....	5	.....	5	.80	5	120
Rosebud	750	.....	.....	.....	.....	.....	— 1	250
Sanders	575	.....	.....	.....	.....	.....	.....	225
Sheridan	1,475	.....	.....	.....	.....	.....	.....	50
Silver Bow	332	.....	12	.....	12	3.61	12	70
Stillwater	300	.....	.....	.....	.....	.....	.....	25
Sweet Grass	410	.....	10	.....	10	2.43	10	100
Teton	1,334	.....	.....	.....	.....	.....	.....	125
Toole	550	.....	.....	.....	.....	.....	.....	200
Valley	920	.....	.....	.....	.....	.....	.....	20
Wibaux	300	.....	.....	.....	.....	.....	.....	25
Yellowstone	800	.....	2.5	.....	2.5	.31	2.5	300
Total	39,204	78	514.25	17	609.25	1.55	514.25	6,528.05

[1] Sand-clay. [2] Shale.

NEBRASKA.

TABLE 19.—*Mileage of public roads outside of incorporated cities and towns, 1914.*

County.	Total mileage of all roads.	Surfaced roads.					Graded and drained earth.
		Sand-clay.	Other hard-surfaced roads.	Total of surfaced roads.	Percentage of roads surfaced.	Increase in surfaced mileage over 1909.	
Adams	1,232						
Antelope	1,025	25		25	2.43	25	100
Arthur	300						
Banner	445						
Blaine	150						
Boone	500						200
Box Butte	500						200
Boyd	672	2		2		2	180
Brown	226	1		1		1	75
Buffalo	1,500	22		22	1.46	21	
Burt	775						250
Butler	1,150						650
Cass	1,086						436
Cedar	1,500		[1] 1	1		−129.5	
Chase	500					− 10	10
Cherry	1,600	50		50	3.12	50	50
Cheyenne	1,269	90		90	7.09	90	60
Clay	550						400
Colfax	701		[2] 1	1		1	250
Cuming	1,074						
Custer	3,700	200		200	5.4	200	500
Dakota	508						
Dawes	965						50
Dawson	1,510	10		10	.66	10	500
Deuel	245						20
Dixon	700						
Dodge	1,041		[3] 2.0	2		1.75	1,039
Douglas	675		[4] 41.88	41.88	6.2	− 14.92	500
Dundy	200						20
Fillmore	1,152						105
Franklin	1,053					− 10	553
Frontier	1,100						150
Furnas	1,000						300
Gage	864						300
Garden	600						
Garfield	800					− 1	
Gosper	850						300
Grant							
Greeley	70						20
Hall	1,026	25	[5] 1	26	2.53	26	800
Hamilton	1,800						1,500
Harlan	1,000						400
Hayes	500						
Hitchcock	850	2		2		2	120
Holt	500						200
Hooker	152		[6] 2	2		2	
Howard	1,200						400
Jefferson	200	2		2		2	
Johnson	759						700
Kearney	1,012	3		3			670
Keith	400						
Keyapaha	540	40		40	7.4	40	
Kimball	320						20
Knox	700	20		20	2.85	20	90
Lancaster	2,001		[7] 1.0	1		1	1,000
Lincoln	1,500	10	[1] 10	20	1.33	20	150
Logan	212						30
Loup	270						20
McPherson	500						
Madison	1,172	400		400	34.12	394	500
Merrick	960	5		5		5	864
Morrill	660		[2] 2	2		2	150
Nance	900						
Nemaha	745		[5] 1.5	1.5			
Nuckolls	1,100						500

[1] Gravel.
[2] Macadam.
[3] 0.5 mile concrete; 1.5 miles gravel.
[4] Concrete, 3.53; macadam, 35.65; brick, 1.9; bituminous macadam, 0.8.
[5] Concrete.
[6] Gypsum.
[7] 0.5 mile brick; 0.5 mile bituminous macadam.

NEBRASKA—Continued.

TABLE 19.—*Mileage of public roads outside of incorporated cities and towns, 1914*—Con.

County.	Total mileage of all roads.	Surfaced roads.					Graded and drained earth.
		Sand-clay.	Other hard-surfaced roads.	Total of surfaced roads.	Percentage of roads surfaced.	Increase in surfaced mileage over 1909.	
Otoe	1,225						
Pawnee	864						
Perkins	520						
Phelps	1,015					— 4	800
Pierce	1,152	15		15	1.3	15	704
Platte	1,150						850
Polk	820						525
Redwillow	926		[1] 1	1		1	325
Richardson	982		[2] .56	.56		.56	129.5
Rock	400						
Saline	1,500						1,000
Sarpy	400						150
Saunders	1,685	3.6		3.6		3.6	1,671.4
Scotts Bluff	609	.5	[3] 8.5	9	1.47	9	250
Seward	500						400
Sheridan	780						233
Sherman	2,700	200		200	7.4	200	1,800
Sioux	745						
Stanton	900					— 4.50	400
Thayer	1,096						
Thomas	150	5		5	3.33	5	
Thurston	411						26
Valley	830						150
Washington	600						400
Wayne	931						931
Webster	864						464
Wheeler	450					— 20	
York	1,300						1,000
Total	80,272	1,131.1	73.44	1,204.54	1.5	955.99	27,540.9

[1] Concrete. [2] Macadam. [3] Gravel.

NEVADA.

TABLE 20.—*Mileage of public roads outside of incorporated cities, 1915.*

County.	Total mileage of all roads.	Surfaced roads.					Graded and drained earth.
		Gravel.	Sand-clay.	Total of surfaced roads.	Percentage of roads surfaced.	Increase in surfaced mileage over 1909.	
Churchill	766	[1] 1	5	6	0.77	6	
Clark	1,170						
Douglas	143	[1] 50		51	35.66	48	92
Elko	1,645						300
Esmeralda	341		20	20	5.87	20	80
Eureka	405						
Humboldt	1,400						
Lander	734						
Lincoln	646						
Lyon	721						
Mineral	1,134						
Nye	819					— 1	
Ormsby	50	3	2	5	10	— 7	15
Storey	30					—20	25
Washoe	1,148	140	40	180	15.67	170	568
White Pine	1,030						
Total	12,182	195	67	262	2.14	216	1,060

[1] Crushed rock.

NEW MEXICO.

TABLE 21.—*Mileage of public roads outside of incorporated cities and towns, 1914.*

County.	Total mileage of all roads.	Surfaced roads.					Graded and drained earth.
		Gravel.	Sand-clay.	Total of surfaced roads.	Percentage of roads surfaced.	Increase in surfaced mileage over 1909.	
Bernalillo	240	20	.....	20	8.33	20	40
Chaves	543	2	10	12	2.2	12	75
Colfax	496	.....	.....	.....	.....	.....	200
Curry	222	.....	15	15	6.75	15	35
Dona Ana	432	[1] 95	10	105	24.3	105	130
Eddy	368	.....	.....	.....	.....	.....	100
Grant	554	.....	.....	.....	.....	.....	150
Guadalupe	536	.....	.....	.....	.....	.....	60
Lincoln	468	4	.....	4	.85	4	75
Luna	348	5	25	30	8.62	27	60
McKinley	422	.....	.....	.....	.....	.....	50
Mora	326	3	.....	3	9.2	3	45
Otero	338	20	.....	20	5.91	—31	60
Quay	430	.....	.....	.....	.....	.....	50
Rio Arriba	508	.....	.....	.....	.....	—50	30
Roosevelt	326	.....	.....	.....	.....	.....	50
Sandoval	364	10	4	14	3.84	14	35
San Juan	500	.....	.....	.....	.....	.....	60
San Miguel	460	.....	.....	.....	.....	.....	125
Santa Fe	300	.....	.....	.....	.....	.....	50
Sierra	446	12	.....	12	2.69	12	75
Socorro	1,092	15	.....	15	1.37	15	100
Taos	326	.....	.....	.....	.....	.....	50
Torrance	500	.....	.....	.....	.....	.....	25
Union	800	.....	1.5	1.5	.18	1.5	118.5
Valencia	528	3	7	10	1.89	10	58
Total	11,873	[1] 189	72.5	261.5	2.2	157.5	1,906.5

[1] Includes 5 miles bituminous macadam.

NORTH DAKOTA.

TABLE 22.—*Mileage of public roads outside of incorporated cities and towns, 1914.*

County.	Total mileage of all roads.	Surfaced roads.			Graded and drained earth.
		Total of surfaced roads (all gravel).	Percentage of roads surfaced.	Increase in surfaced mileage over 1909.	
Adams	1,000	.....	.....	.....	200
Barnes	2,506	6.5	0.25	— 3.5	1,000
Benson	1,247	47	3.76	42	400
Billings	500	.....	.....	— 8	500
Bottineau	1,620	20	1.23	15	400
Bowman	1,160	.....	.....	.....	360
Burke	1,131	31	2.74	31	400
Burleigh	1,162	2	.17	.....	210
Cass	3,200	.....	.....	.....	2,500
Cavalier	1,934	4.5	.23	1.5	1,260
Dickey	1,072	32	2.98	30	400
Divide	1,800	.....	.....	.....	600
Dunn	1,000	.....	.....	.....	350
Eddy	315	15	4.76	13	100
Emmons	1,020	.....	.....	.....	50
Foster	1,305	5	.38	3	200
Golden Valley	340	.....	.....	.....	40
Grand Forks	2,890	160	6.63	150	1,650
Griggs	550	90	16.36	85	260
Hettinger	1,235	.....	.....	.....	135
Kidder	785	.....	.....	.....	85
Lamoure	1,605	5	.31	2	600
Logan	1,150	.....	.....	.....	150
McHenry	2,050	50	2.43	45	800
McIntosh	336	.....	.....	— 3	66

NORTH DAKOTA—Continued.

TABLE 22.—*Mileage of public roads outside of incorporated cities and towns, 1914*—Continued.

County.	Total mileage of all roads.	Surfaced roads.			Graded and drained earth.
		Total of surfaced roads (all gravel).	Percentage of roads surfaced.	Increase in surfaced mileage over 1909.	
McKenzie	500	.....	.....	.....	15
McLean	2,810	10	.35	5	300
Mercer	400	.....	.....	.....	30
Morton	2,935	.....	.....	—10	335
Mountrail	2,000	.....	.....	.....	200
Nelson	1,130	30	2.65	25	500
Oliver	500	.....	.....	.....	.....
Pembina	1,504	4	.26	4	1,000
Pierce	1,310	10	.76	10	600
Ramsey	1,340	40	2.98	28	500
Ransom	1,220	20	1.78	20	600
Renville	804	14	1.73	14	240
Richland	2,100	.....	.....	.....	1,500
Rolette	2,200	250	11.36	245	450
Sargent	1,700	.....	.....	.....	800
Sheridan	1,000	.....	.....	.....	100
Sioux	200	.....	.....	.....	.....
Slope	600	.....	.....	.....	100
Stark	953	3	.31	— 2	200
Steele	1,015	15	1.47	12	400
Stutsman	2,150	50	2.32	50	600
Towner	770	.....	.....	— 5	420
Traill	1,710	10	.58	5	1,600
Walsh	1,900	.....	.....	— 5	1,200
Ward	902	2	.22	— 8	100
Wells	1,500	.....	.....	— 5	500
Williams	729	29	3.97	29	300
Total	68,796	955	1.38	815	25,306

OHIO.

TABLE 23.—*Mileage of public roads outside of incorporated cities and towns, 1914.*

County.	Total mileage of all roads.	Surfaced roads.									Graded and drained earth.
		Macadam.	Bituminous macadam.	Gravel.	Brick.	Concrete.	Miscellaneous.	Total of surfaced roads.	Percentage of roads surfaced.	Increase in surfaced mileage over 1909.	
Adams	915	243	.....	100	.....	.....	[1] 86	429	46.88	120	146
Allen	934	748.7	6.5	30	10.25	4.2	.....	799.65	85.49	279.65	.....
Ashland	955.24	50	14.25	8	6.62	.5	.....	79.37	8.3	61.37	.....
Ashtabula	1,261	36.86	.....	5	5.25	6.11	.....	53.22	4.22	17.22	.....
Athens	1,005	97	.....	10	9	.....	.....	116	11.53	— 12	.....
Auglaize	850	15	1	674	.....	.....	.....	690	81.17	306	100
Belmont	1,300	.....	84.95	.....	38.1	2	.....	125.05	9.6	.05	.....
Brown	864	203	.....	114	.....	.....	.....	317	36.68	11	547
Butler	814	.....	143.8	558.60	5.5	.....	.....	707.9	86.9	—163.1	.....
Carroll	1,000.5	.....	.....	.....	3.5	.....	.....	3.5	.34	3.5	.....
Champaign	802	15	1	.....	.....	2	.....	18	2.24	—444	.....
Clark	862	50	5	782	.....	.....	.....	837	97.09	— 25	.....
Clermont	987	[2] 299.5	.....	.....	.....	1	.....	300.5	30.44	—134.5	.....
Clinton	835	150	8	475	.....	.....	.....	633	75.8	— 46	42
Columbiana	1,333.5	1.5	2	.....	30	.....	.....	33.5	2.51	15.5	.....
Coshocton	1,143	2	.....	110	2.5	2.5	.....	117	10.23	43	300
Crawford	870.25	330	2.5	28	9.75	.....	.....	370.25	42.5	80.25	500
Cuyahoga	572	.....	1	.....	128	.....	.....	129	22.5	— 24	4.5
Darke	1,290.8	51	3	1,023.8	.....	7	.....	1,084.8	84.04	324.8	206
Defiance	855	30	.....	429	.....	5.3	.....	464.3	54.3	5.3	.....
Delaware	828.4	535	.....	20	.4	.....	.....	555.4	67.04	82.4	50
Erie	460	165	9	28	.....	15	[3] 28	245	53.26	— 37	45

[1] Sand-clay. [2] Worn macadam, 277. [3] Slate.

OHIO—Continued.

TABLE 23.—*Mileage of public roads outside of incorporated cities and towns, 1914*—Con.

County.	Total mileage of all roads.	Surfaced roads.									Graded and drained earth.
		Macadam.	Bituminous macadam.	Gravel.	Brick.	Concrete.	Miscellaneous.	Total of surfaced roads.	Percentage of roads surfaced.	Increase in surfaced mileage over 1909.	
Fairfield	1,100	225	.....	325	3	.....	.....	553	50.27	346	.....
Fayette	643	143	3	350	6	.....	.....	502	78.07	204	.....
Franklin	1,001.4	354	34.8	301.8	6.8	2.3	.....	699.7	69.87	194.7	261.7
Fulton	934	136	7	360	.....	.....	.....	503	53.85	113	381
Gallia	992	126	.....	50	3.22	.....	.....	179.22	18.06	20.22	36
Geauga	780	11	.....	15	3	5	.....	34	4.35	21	46
Greene	750	80	.....	590	.....	.....	.....	670	89.33	— 2	.....
Guernsey	1,135	15.25	2.18	.....	16	1	.....	34.43	3.03	4.43	.....
Hamilton	725	197	256	150	2	.....	.....	605	83.44	281	120
Hancock	1,225	600	.....	120	.....	.....	.....	720	58.77	337	505
Hardin	939	230	.....	201	.....	.....	.....	431	45.9	.....	.....
Harrison	940	76	.....	.....	1.35	4.88	.....	82.23	8.74	30.23	450
Henry	875	290	.....	165	.....	.....	.....	455	52	68	420
Highland	1,028	34	.....	322	.....	.....	[1] 8	364	35.4	— 33	522
Hocking	828	15	1	27	2	.....	.....	45	5.43	3	.....
Holmes	1,023	4.3	1.54	.....	2.08	.64	.....	8.56	.83	— 22.44	30
Huron	966	160	5	.....	1	75	.....	241	24.94	116	725
Jackson	743	129.91	.....	26.75	.....	.....	[2] 20	176.66	23.7	14.66	.....
Jefferson	828.2	164.1	.....	.....	5.1	.....	.....	169.2	20.4	17.2	.....
Knox	1,131	9	.....	127	.....	.4	.....	136.4	12.06	134.4	994.6
Lake	427	1.5	2	26	17.5	25.5	.....	72.5	16.97	—190.5	324.5
Lawrence	774.25	194	3	64.5	.....	.75	.....	262.25	33.87	83.25	3
Licking	1,400	39.88	31.61	200	.5	18.66	.....	290.65	20.75	— 21.35	50
Logan	888	15	.....	485	.....	.....	.....	500	56.3	15	.....
Lorain	914	163	39	12	.....	6.3	.....	220.3	24.1	103.3	693.7
Lucas	769	101.6	118.55	.....	.95	2.48	.....	223.58	29.07	102.58	.....
Madison	721	14	.....	695	.....	.....	.....	709	98.33	163	6
Mahoning	922	151	27	.....	35	5	.....	218	23.64	156	.....
Marion	789	250	22	120	.....	.....	.....	392	49.68	77	397
Medina	852.2	80.5	4.5	71.25	12.7	25	.....	193.95	22.75	83.95	.....
Meigs	1,000.5	.....	.....	1.5	7	2	.....	10.5	1.04	— 2.5	400
Mercer	1,320	160	2	395	.....	13	.....	570	43.18	72	700
Miami	870.22	4.6	8.6	703.53	.....	8.24	.....	724.97	83.38	45.97	107.25
Monroe	1,262	4	.....	.....	5	1	.....	10	.79	10	300
Montgomery	1,064	69.35	10.65	824	7	.....	.....	911	85.62	— 87	153
Morgan	1,025.3	107	.....	10	2.3	.....	.....	119.3	11.63	51.3	20
Morrow	950.62	125	10	.....	.....	.62	.....	135.62	14.26	75.62	500
Muskingum	1,561	4	.....	.....	16	15	[2] 5	40	2.56	— 57	50
Noble	1,004	40	1.04	.....	10	.....	.....	51.04	5.08	27.04	.....
Ottawa	595	219	28	.....	.....	.....	.....	247	41.5	192	341
Paulding	1,017.5	525	.....	22	.....	.5	.....	547.5	53.8	192.5	.....
Perry	1,000	28	10	.....	10	.....	.....	48	4.8	— 9	100
Pickaway	803	7.25	.....	638	.....	5.3	.....	650.55	81.01	454.55	.....
Pike	875	10	.....	155	.....	1	.....	166	18.97	42	.....
Portage	1,000	6	13	20	24.2	9	.....	72.2	7.22	58.2	.....
Preble	957.5	2	15	900	.....	.5	.....	917.5	95.82	288.5	25
Putnam	1,199	598	.....	80	.....	1	.....	679	56.63	209	520
Richland	1,344	100	19	15	2.25	3.5	[2] 100	239.75	17.83	158.75	.....
Ross	1,100	.50	.....	470	2	7.2	.....	479.7	43.6	92.7	.....
Sandusky	980.55	450	2	30	2.29	3.26	.....	487.55	49.7	109.55	393
Scioto	863	3	.....	337	5	4	.....	349	40.44	138	214
Seneca	1,172.5	414.9	1.6	.....	.....	.....	.....	416.5	35.5	277.5	.....
Shelby	990	501	1	.....	.....	.....	.....	502	50.7	82	400
Stark	1,108.5	.....	15.1	121.6	67	.....	.....	203.7	18.37	191.7	904.8
Summit	1,000	3.6	3	.....	36	2.4	10	55	5.5	25	945
Trumbull	1,178	240	25	80	29	5	.....	379	32.17	261	.....
Tuscarawas	1,486.5	10	1.5	10	14.5	.5	.....	36.5	2.46	26.5	400
Union	900	145	3	560	.....	.....	.....	708	78.66	3	.....
Van Wert	1,306	633	.....	.....	.....	.....	.....	633	48.46	— 33	.....
Vinton	879	13.87	.....	.....	.....	2.33	.....	16.2	1.84	16.2	.....
Warren	861	237	.....	438.3	.....	.8	.....	676.1	78.5	17.1	.....
Washington	1,430	20.4	.....	35	5.3	7.5	.....	68.2	4.76	44.2	200
Wayne	1,270	1	.....	1	25	.....	.....	27	2.12	21	1
Williams	931.12	43.8	1.62	258.3	.....	.....	.....	303.72	32.6	94.72	.....
Wood	1,446	845	50	.....	1.5	3.5	.....	900	62.24	375	500
Wyandot	822	300	5	81	2	.....	.....	388	47.2	115	200
	86,353.55	12,903.87	1,066.29	15,385.93	640.41	315.67	[3] 257	30,569.17	35.16	6,463.17	15,280.05

[1] Marl.
[2] Sand-clay.
[3] Includes sand-clay, 211; slate, 28; marl, 8; and miscellaneous, 10.

OREGON.

TABLE 24.—*Mileage of public roads outside of incorporated cities and towns, 1914.*

County.	Total mileage of all roads.	Surfaced roads.							Graded and drained earth.
		Macadam.	Bituminous macadam.	Gravel.	Other hard-surfaced roads.	Total of surfaced roads.	Percentage of roads surfaced.	Increase in surfaced mileage over 1909.	
Baker	2,100	.....	.....	30	.....	30	1.42	25	25
Benton	566	25	.....	141	.....	166	29.32	166	25
Clackamas	1,316	103	7	162	[1] 91	363	27.58	83	.....
Clatsop	250	62	2	9	[2] 4	77	30.8	2	42
Columbia	355.75	39.75	5	68.75	.....	113.5	31.9	— 36.5	58.75
Coos	695	60	.....	30	[4] 55	145	20.86	60	.....
Crook	2,100	.....	.....	50	[3] 260	310	14.76	300	500
Curry	155	.....	.....	36	[4] 50	86	55.45	70	.....
Douglas	1,800	20	.....	250	.....	270	15	193	300
Gilliam	525	.....	.....	4	.....	4	.77	4	.....
Grant	830	.....	.....	11	.....	11	1.32	10	.....
Harney	2,000	4	.....	4	.....	8	.4	—107	100
Hood River	270	20.50	.....	12	.....	32.5	12.03	— .5	.....
Jackson	800	30	5	100	[2] 12	147	18.37	— 10	200
Josephine	418	8	.....	40	.....	48	11.48	36	150
Klamath	850	2	.....	10	.....	12	1.41	— 2	50
Lake	750	.....	.....	50	.....	50	6.66	— 30	.....
Lane	1,567.37	133.47	.....	402.4	[5] 27.5	563.37	35.94	54.37	.....
Lincoln	400	6	.....	10	.....	16	4	16	.....
Linn	1,860	60	.....	600	.....	660	41.25	350	400
Malheur	1,600	.....	.....	5	.....	5	.31	5	.....
Marion	3,002	80	2	80	.....	162	5.39	82	100
Morrow	950	13	.....	.....	.....	13	1.36	13	.....
Multnomah	510.73	96	63	105	[6] 10.03	274.03	53.79	44.73	108
Polk	1,118	10	8	390	.....	408	36.49	284	360
Sherman	600	.....	.....	2	.....	2	.33	2	100
Tillamook	310.33	50	.25	125	[7] 8.75	184	59.29	61	15
Umatilla	3,500	.....	30	12	.....	42	1.2	41	500
Union	800	3	.....	25	.....	28	3.5	8.75	100
Wallowa	950	.....	.....	10	.....	10	1.05	— 5	300
Wasco	1,000	25	15	100	.....	140	14	128	360
Washington	1,077	100	.....	30	.....	130	12.07	70	50
Wheeler	493	.....	.....	6	.....	6	1.21	.....	.....
Yamhill	1,300	50	.....	150	.....	200	15.36	.....	900
	36,819.18	1,000.72	137.25	3,060.15	518.28	4,716.4	12.81	1,917.85	4,718.75

[1] Plank.
[2] Concrete.
[3] 250 miles sand-clay; 10 miles volcanic cinders.
[4] Sand-clay.
[5] Plank corduroy.
[6] 0.37 miles wood block; 9.66 miles concrete.
[7] 2.75 miles concrete; 6 miles plank.

SOUTH DAKOTA.

TABLE 25.—*Mileage of public roads outside of incorporated cities and towns, 1914.*

County.	Total mileage of all roads.	Surfaced roads.						Graded and drained earth.
		Gravel.	Sand-clay.	Other hard-surfaced roads.	Total of surfaced roads.	Percentage of roads surfaced.	Increase in surfaced mileage over 1909.	
Aurora	1,440							59
Beadle	1,470							125
Bennett [1]								
Bonhomme	1,077							533
Brookings	1,584	5			5	.31	5	400
Brown	2,856	12			12	.42	12	1,200
Brule	1,500						− 5	100
Buffalo	500						− 5	10
Butte	810							40
Campbell	75							75
Charles Mix	1,300							300
Clark	1,946							589
Clay	798						− 25	798
Codington	1,110	10			10	.9	5	1,100
Corson	227.5							106.5
Custer	500							50
Davison	450	10			10	2.22	− 8	65
Day	2,000	10			10	.5	10	30
Deuel	1,260							1,000
Dewey	2,500						− 6	1,000
Douglas	1,016							
Edmunds	2,304		1		1	.04	− 23	50
Fall River	370							120
Faulk	2,012							4
Grant	1,564							
Gregory	1,200							300
Haakon	3,600							
Hamlin	650							200
Hand	2,876	2			2	.06	2	100
Hanson	912	3			3	.32	− 1	20
Harding	5,000							300
Hughes	1,000	4			4	.4	4	200
Hutchinson	1,652							
Hyde	1,741							12
Jerauld	486							150
Kingsbury	864	40			40	4.62	40	624
Lake	600	5			5	.83	5	300
Lawrence	800	4	100	12	116	14.50	116	200
Lincoln	1,500	70		[2] 10	80	5.33	79	1,100
Lyman	[3] 3,000							
McCook	1,000							
McPherson	1,500							300
Marshall	1,440	10	3		13	.90	13	450
Meade	2,595		20		20	.77	− 55	1,000
Mellette	200							5
Miner	1,172							234
Minnehaha	1,632							1,632
Moody	1,060							100
Pennington	5,548							
Perkins	5,766							
Potter	1,500							100
Roberts	[3] 1,162	18			18	1.54		
Sanborn	880						− 50	80
Shannon	[3] 1,000							
Spink	3,000	4			4	.13	4	496
Stanley	[3] 2,000							
Sully	2,160						− 50	
Todd [1]								
Tripp	[3] 1,400							
Turner	620							460
Union	936	5			5	.53	5	624
Walworth	585		5		5	.85	5	30
Washabaugh	[3] 400							
Washington	([4])							
Yankton	1,500							300
Ziebach	700							
Total	96,306.5	212	129	22	363	.37	77	17,071.5

[1] New county. [2] Macadam with bitumen. [3] Mileage report for 1909. [4] No report received.

UTAH.

TABLE 26.—*Mileage of public roads outside of incorporated cities and towns, 1914.*

County.	Total mileage of all roads.	Surfaced roads.						Graded and drained earth.
		Gravel.	Sand-clay.	Other hard-surfaced roads.	Total of surfaced roads.	Percentage of roads surfaced.	Increase in surfaced mileage over 1909.	
Beaver	55	30	.....	.....	30	54.54	10	.....
Boxelder	1,500	250	220	[1] 5	475	31.66	475	725
Cache	400	35	.....	.....	35	8.75	.....	.....
Carbon	187	.....	.....	.....	.....	.....	−125	61
Davis	100	.....	.....	.....	.....	.....	− 74	50
Emery [2]	160	.....	41	.....	41	25.62	.....	.....
Garfield	500	10	.....	.....	10	2	10	27
Grand	300	18	4	.....	22	7.33	11	20
Iron	248	.....	.....	.....	.....	.....	− 3	97
Juab	200	60	.....	.....	60	30	53	140
Kane	100	.....	15	.....	15	15	15	14
Millard	250	.....	100	.....	100	40	95.5	.....
Morgan	101	2	.....	[3] 13	15	14.85	12	11
Piute	109	9	20	.....	29	26.6	− 21	.....
Rich	220	20	.....	.....	20	9.09	− 15	50
Salt Lake	400	125	.....	[4] 9	134	33.5	− 74.5	100
San Juan	167	.....	.....	.....	.....	.....	− 18	167
Sanpete	400	.....	.....	.....	.....	.....	.....	400
Sevier	293	29.5	.....	.....	29.5	10.05	−180.5	66
Summit	210	15	.....	[5] 5	15.5	7.38	10.5	42
Toole	[6] 1,000	10.25	.....	.....	10.25	1.02	6.25	10.61
Uinta	604	.....	.....	.....	.....	.....	− 13	237
Utah [2]	400	40	.....	[3] 5	45	11.25	.....	.....
Wasatch	124	.....	.....	.....	.....	.....	− 22	55
Washington	230	.....	.....	.....	.....	.....	.....	55
Wayne	127	3	.....	.....	3	2.37	3	32
Weber	425	29	1	[7] 34.5	64.5	15.17	− 19.5	43.5
Total	8,810	685.75	401	67	1,153.75	13.09	135.75	2,403.11

[1] Concrete, 2; bituminous macadam, 3.
[2] Mileage report for 1909.
[3] Macadam.
[4] Macadam, 8; bituminous macadam, 1.
[5] Concrete.
[6] Total mileage from 1909 report.
[7] Macadam, 23; bituminous macadam, 11.5.

WASHINGTON.

TABLE 27.—*Mileage of public roads outside of incorporated cities and towns, 1914.*

County.	Total mileage of all roads.	Surfaced roads.											Graded and drained earth.
		Macadam.	Bituminous macadam.	Gravel.	Sand-clay.	Brick.	Concrete.	Other hard-surfaced roads.	Total of surfaced roads.	Percentage of roads surfaced.	Increase in surfaced mileage over 1909.	
Adams	2,318.85	.....	6.85	17	.....	.....	.....	.....	23.85	1.02	23.85	1,200
Asotin	450.6	1.5	.1	5	.....	.....	.....	.....	6.6	1.46	6.6	20
Benton	975.4	12	10.4	25	.....	.....	.....	.....	47.4	4.85	42.65	100
Chelan	730	.....	.....	27	.....	.....	.....	.....	27	3.69	25.67	52
Clallam	230.5	.....	.....	152.5	.....	.....	.....	.....	152.5	66.16	62.5	20
Clarke	1,300	90	22	150	.....	.....	3	.....	265	20.38	52	75
Columbia	480	12	.....	14	10	.....	.....	.....	36	7.5	34.5	10
Cowlitz	598.75	35	2.5	20	.....	.....	1.25	[1] 40	98.75	16.49	69.75	100
Douglas	2,328.8	12.2	.....	16.6	.....	.....	.....	.....	28.8	1.23	−305.2	500
Ferry	770	3	.....	.....	.....	.....	.....	.....	3	.38	3	20
Franklin	1,400	1.5	2	1.5	.....	.....	2.5	.....	7.5	.53	7.5	400
Garfield	501.6	1.6	.....	.....	.....	.....	.....	.....	1.6	.51	1.6	30
Grant	2,308	23	.....	10	.....	.....	.....	.....	33	1.42	29	150
Grays Harbor [2]	494.21	.....	.47	282	.....	.....	4.74	[3] 80	367.21	74.3	94.21	39
Island	224.14	.....	.....	61.84	1.25	.....	.....	.....	63.09	28.14	5.2	53.68
Jefferson	240	.....	.....	56	.....	.....	.....	.....	56	23.33	56	60
King	1,589.03	.....	25.4	1,057.8	.....	23.4	6.33	.....	1,112.93	70.03	499.8	276.1
Kitsap	758.5	.....	.....	89.25	61.75	.....	.....	.....	151	19.9	151	211
Kittitas	643.4	.....	2.2	40	.....	1.2	.....	.....	43.4	6.74	43.15	200
Klickitat	1,675.3	5.6	10.2	9	.5	.....	.....	.....	25.3	1.51	25.3	550
Lewis	1,100	80	.49	45	.....	.....	12.47	.....	137.96	12.54	34.46	300
Lincoln	3,100.5	29	.....	50	.....	.....	.5	.....	79.5	2.82	79.5	800
Mason	450.25	.....	.....	83.25	.....	.....	.....	.....	83.25	18.48	— 96.75	114
Okanogan	1,850.1	27.2	.....	11.46	.....	.....	.....	.....	38.66	2.08	38.66	15
Pacific	237.75	30	.....	29	.....	.....	.75	[4] 18	77.75	32.7	19.55	102
Pend Oreille	508	.....	.....	8	.....	.....	.....	.....	8	1.57	8	100
Pierce	973.87	7.76	10.14	354.22	.....	.75	28.02	.....	400.89	41.78	— 44.26	200.48
San Juan	200.45	.75	.....	18.75	.....	.....	.....	.....	19.5	9.72	— 64.75	35
Skagit	763.75	4	.....	380	.....	.....	6.75	.....	390.75	51.16	14.75	273
Skamania	152	2.5	.....	15	.....	.....	.....	.....	17.5	11.51	13.5	109
Snohomish	764.55	1.5	.....	429.5	.....	1	3.55	.....	435.55	56.96	−390.45	329
Spokane	2,399.78	35.12	34	14.66	.....	.....	.....	.....	83.78	3.49	14.28	60
Stevens	2,014.24	7.09	.....	7.15	.....	.....	.....	.....	14.24	.70	12.24	120
Thurston	776	7	.....	.....	.....	.....	.....	.....	7	.90	−148	223
Wahkiakum	109	18	.....	9	.....	.....	.....	[4] 2	29	26.6	— 4	50
Walla Walla	1,435.06	30	5	50	.....	.....	.06	.....	85.06	5.92	79.93	1,000
Whatcom	750	.....	.....	260	.....	.....	9.5	.....	269.5	35.93	−258	100
Whitman	2,700	15.5	18	.....	10	.....	.....	.....	43.5	1.61	34.85	1,328.5
Yakima	2,125.77	10	15.77	125	.....	.....	.....	.....	150.77	7.09	127.82	125
Total	42,428.15	502.82	165.52	3,924.48	83.5	26.35	79.42	140	4,922.09	11.61	401.41	9,450.76

[1] 15 miles plank; 25 miles corduroy.
[2] This was Chehalis County in 1909.
[3] 64 miles plank; 16 miles corduroy.
[4] Plank.

WISCONSIN.

TABLE 28.—*Mileage of public roads outside of incorporated cities and towns, 1914.*

County.	Total mileage of all roads.	Surfaced roads.									Graded and drained earth.
		Macadam.	Bituminous macadam.	Gravel.	Sand-clay.	Concrete.	Other hard-surfaced roads.	Total of surfaced roads.	Percentage of roads surfaced.	Increase in surfaced mileage over 1909.	
Adams	1,111	1	1	.....	26	.....	.....	28	2.52	22	184
Ashland	513	12	.....	44	11	.....	8	75	14.6	53	226
Barron	1,591	.....	.....	2	40	.....	.....	42	2.63	29	846
Bayfield	837	.....	.....	.....	2	.....	3	5	.59	−45	473
Brown	1,064	112	2	172	44	1.5	.....	331.5	31.1	18.5	399
Buffalo	1,097	.....	6	2	33	.....	.....	41	3.73	7	279
Burnett	1,172	.....	.....	50	10	.....	.....	60	5.11	32	276
Calumet	637	4	1	381	13	.....	.....	399	62.6	−24	111
Chippewa	1,273	4	.....	75	140	.....	.....	219	17.2	187	538
Clark	1,621	1	.....	37	48	.....	.....	86	5.3	51	1,045
Columbia	1,334.07	40	19	141	26	.07	3	229.07	17.17	45.07	570
Crawford	1,086	.....	.....	10	6	.....	.....	16	1.47	0	100
Dane	2,248	74	45	231	26	1.5	2	379.5	16.8	60.5	920
Dodge	1,591	34	13	467	31	.5	.....	545.5	34.2	96.5	518
Door	980	94	.....	182	5	.....	.....	281	28.6	82	384
Douglas	999	11	.....	34	5	2.4	.....	52.4	5.24	38.4	356
Dunn	1,480	1	.....	34	90	.....	.....	125	8.44	78.67	511
Eau Claire	993	9	.....	59	164	.....	.....	232	23.3	136	424
Florence	221	6	3	20	9	.....	16	54	24.4	28	82
Fond du Lac	1,296	28	3	449	43	1.5	.....	524.5	40.4	66.5	429
Forest	299	1	.....	.....	.....	.....	.....	1	.33	−22	110
Grant	2,070	87	.....	126	37	.....	2	252	12.17	137	859
Green	1,070	88	.....	96	16	.9	.....	200.9	18.77	137.9	362
Green Lake	568	7	4	77	31	.....	.....	119	20.9	45	222
Iowa	1,142	5	.....	.....	20	.6	.....	25.6	2.24	−35.4	524
Iron	196	2	.....	5	.....	.....	[1] 16.4	23.4	11.9	10.4	108
Jackson	1,474	.....	.....	6	132	.....	.....	138	9.36	48	498
Jefferson	907	24	13	172	51	.....	.....	260	28.6	−18	330
Juneau	1,227	12	.....	3	22	.1	.....	37.1	3.02	6.1	441
Kenosha	486	12	.....	161	17	11	.....	201	41.3	83	162
Kewaunee	724	12	.....	280	8	.....	.....	300	41.4	71	236
La Crosse	719	34	23	35	.....	.....	.....	92	12.7	−17	291
Lafayette	1,142	11	3	15	3	.5	.....	32.5	2.84	−28.5	584
Langlade	710	.....	.....	13	21	.....	.....	34	4.78	9	394
Lincoln	737	.....	.....	33	38	.....	.....	71	9.63	18	364
Manitowoc	1,274	23	.....	699	.....	1	.....	723	56.7	346	296
Marathon	2,218	25	.....	86	29	.....	.....	140	6.31	54	1,269
Marinette	1,245	20	.....	114	15	.....	4	153	12.28	66	545
Marquette	750	10	.....	51	44	.....	.....	105	14	83	248
Milwaukee	513	41	3	264	.....	51.6	[2] 11	370.6	72.2	138.6	92
Monroe	1,302	30	10	19	35	.1	.....	95	7.29	34	524
Oconto	1,040	14	.....	164	32	.....	.....	210	20.19	43	397
Oneida	708	.....	.....	5	18	.....	.....	23	3.24	23	374
Outagamie	1,147	38	2	240	35	.....	9	324	28.2	65	469
Ozaukee	496	10	.....	376	.....	.....	.....	386	81.45	61	54
Pepin	417	.....	.....	5	29	.....	.....	34	8.15	17	176
Pierce	1,232	1	.....	57	29	.....	.....	87	7.06	−56	487
Polk	1,614	.....	.....	45	29	.....	.....	74	4.58	39	857
Portage	1,364	30	4	29	24	.....	.....	87	6.37	1	594
Price	794	.....	.....	9	.....	.....	.....	9	1.13	−32	493
Racine	606	18	4	274	.....	4	.....	300	49.5	56	195
Richland	1,191.2	19	.....	18	18	.2	.....	55.2	4.63	− 5.8	513
Rock	1,296	76	.....	467	30	.....	.....	573	44.21	251	407
Rusk	808	.....	.....	19	4	.....	.....	23	2.84	1	491
St. Croix	1,398	.....	.....	187	10	.....	.....	197	14.09	87	776
Sauk	1,502	113	.....	66	64	.3	.....	243.3	16.19	178.3	586
Sawyer	565	.....	.....	.....	10	.....	.....	10	1.77	4	274
Shawano	1,411	8	.....	164	57	.....	.....	229	16.2	119	700
Sheboygan	1,130.2	10	.....	439	24	3.2	.....	476.2	42.1	−173.8	392
Taylor	867	.....	.....	36	28	.....	.....	64	7.38	6	529
Trempealeau	1,239	11	6	29	59	.....	.....	105	8.47	21	735
Vernon	1,554	8	.....	12	4	.....	.....	24	1.54	−28	843
Vilas	410	.....	.....	10	10	.....	.....	20	4.87	20	237
Walworth	1,076	34	4	423	37	.....	.....	498	46.2	140	341
Washburn	1,021	.....	.....	.....	5	.....	.....	5	.48	−29	506
Washington	946	7	.....	531	15	.....	.....	553	58.4	18	254
Waukesha	1,120	71	.....	572	.....	.....	.....	643	57.4	67	268
Waupaca	1,487	16	.....	203	86	.....	.....	305	20.5	162	578
Waushara	1,319	25	6	76	74	.....	.....	181	13.7	112	465
Winnebago	848.2	13	8	491	25	1.2	.....	538.2	63.4	−46.8	161
Wood	1,182	11	.....	5	7	.....	.....	23	1.94	−16	645
Total	75,706.67	1,408	183	9,597	2,054	83.07	74.4	13,399.47	17.6	3,232.14	30,927

[1] Includes .4 mile surfaced with brick.

[2] Includes 2 miles surfaced with brick.

WYOMING.

TABLE 29.—*Mileage of public roads outside of incorporated cities and towns, 1914.*

County.	Total mileage of all roads.	Surfaced roads.			Graded and drained earth.
		Total of surfaced roads.[1]	Percentage of roads surfaced.	Increase in surfaced mileage over 1909.	
Albany	989	9	0.91	9	70
Bighorn	340	.....	.....	.....	10
Campbell	600	.....	.....	.....	.....
Carbon	760	.....	.....	.....	10
Converse	656	26	3.96	26	30
Crook	1,550	.....	.....	.....	50
Fremont	600	.....	.....	.....	25
Goshen	500	.....	.....	.....	25
Hot Springs	150	.....	.....	.....	100
Johnson	1,122	2	.17	2	20
Laramie	2,020	.....	.....	.....	20
Lincoln	740	10	1.35	10	130
Natrona	281	5	1.77	5	68
Niobrara	350	.....	.....	.....	.....
Park	840	.5	.05	.5	340
Platte	650	.....	.....	.....	250
Sheridan	614	.....	.....	.....	250
Sweetwater	562	.....	.....	.....	196
Uinta	497	.....	.....	.....	43
Washakie	250	.....	.....	.....	25
Weston	310	.....	.....	.....	10
Total	14,381	52.5	.36	52.5	1,672
Yellowstone National Park	416	416	100	.....	.....
Grand total	14,797	468.5	3.1	52.5	1,672

[1] All gravel.

APPENDIX B.

The following are the tables referred to in the foregoing text giving information as to revenues applied to roads in the States discussed:

ARIZONA.

TABLE 30.—*Revenue applied to roads and bridges, 1914.*

County.	Total revenue applied to roads and bridges.	General county road and bridge tax.		Other revenue applied to roads.	
		Rate, cents per $100.	Amount.	Amount.	Source.
Apache	$12,212.00	15	$9,354.00	$2,000.00	Forest-reserve fund.
				858.00	Per capita tax.
Cochise	107,024.16	10	93,744.87	13,279.29	Do.
Coconino	48,861.06	7	12,036.06	35,955.00	Balance from 1914.
				870.00	Per capita tax.
Gila	48,369.81	10.7	38,815.81	9,554.00	Do.
Graham	12,467.99	9.6	10,000.00	1,859.99	Forest appropriation and miscellaneous receipts.
				608.00	Per capita tax.
Greenlee	66,362.51	19	58,754.51	7,608.00	Do.
Maricopa	106,592.98	13.5	102,920.98	3,672.00	Do.
Mohave	22,313.49	13	19,873.49	2,440.00	Do.
Navajo	17,759.63	23	17,371.63	388.00	Do.
Pima	36,614.13	14	35,837.86	498.27	Forest receipts.
				278.00	Per capita tax.
Pinal	42,574.30	14.3	34,806.80	7,767.50	Do.
Santa Cruz	9,205.93	11	7,011.98	1,155.95	Forest-reserve fund.
				1,038.00	Per capita tax.
Yavapai	67,228.53	14.5	63,038.53	4,190.00	Do.
Yuma	20,457.92	14.2	19,547.92	910.00	Do.
Total	618,044.44	.....	523,114.44	94,930.00	
	[1]355,896.19				
	[2] 8,780.59				
Grand total	982,721.22				

[1] Expenditures from State fund for fiscal year ended June 30, 1914, including motor-vehicle revenue.
[2] Expenditures from county bond issue funds.

CALIFORNIA.

TABLE 31.—*Revenue applied to roads and bridges for the fiscal year ended June 30, 1915.*

County.	Total.	County expenditures on highways.	County expenditures on bridges.
Alameda	$319,532.48	$263,106.33	$56,426.15
Alpine	554.22	554.22	.....
Amador	24,349.47	20,342.74	4,006.73
Butte	207,839.07	99,707.86	108,131.21
Calaveras	34,990.07	34,990.07	.....
Colusa	261,897.44	94,550.04	167,347.40
Contra Costa	201,562.27	187,960.37	13,601.90
Del Norte	41,184.94	25,886.78	15,298.16
El Dorado	37,257.12	24,088.71	13,168.41
Fresno	441,853.92	391,909.46	49,944.46
Glenn	170,850.20	117,805.86	53,044.34
Humboldt	356,024.67	199,498.79	156,525.88
Imperial	181,471.43	160,555.84	20,915.59
Inyo	29,551.48	22,806.84	6,744.64
Kern	470,628.04	464,242.24	6,385.80
Kings	68,633.63	68,439.23	194.40
Lake	38,199.14	24,598.99	13,600.15
Lassen	39,577.52	39,577.52	.....
Los Angeles	2,004,577.94	1,771,504.08	233,073.86
Madera	137,516.57	45,370.57	92,146.00
Marin	96,665.14	63,246.14	33,419.00
Mariposa	27,385.10	16,584.58	10,801.12
Mendocino	188,790.86	126,350.52	62,440.34
Merced	200,060.72	141,576.86	58,483.86
Modoc	25,741.83	24,941.83	800.00
Mono	7,732.73	5,582.73	2,150.00
Monterey	247,382.97	141,608.75	105,774.22
Napa	112,566.22	83,944.39	28,621.83
Nevada	33,838.02	28,383.13	5,454.89
Orange	911,725.44	855,707.33	56,018.11
Placer	64,285.15	41,829.36	22,455.79
Plumas	39,894.09	24,479.14	15,414.95
Riverside	414,801.96	401,605.89	13,196.07
Sacramento	344,175.48	174,471.11	169,704.37
San Benito	74,474.89	40,963.91	33,510.98
San Bernardino	275,756.94	260,761.59	14,995.35
San Diego	254,358.76	233,048.20	21,310.56
San Joaquin	273,054.89	259,824.09	13,230.80
San Luis Obispo	233,236.89	86,358.04	146,878.85
San Mateo	945,991.39	909,092.87	36,898.52
Santa Barbara	267,360.35	188,486.02	78,874.33
Santa Clara	341,462.20	327,686.20	13,776.00
Santa Cruz	125,110.61	95,349.96	29,760.65
Shasta	99,010.97	54,678.46	44,332.51
Sierra	28,649.13	22,808.02	5,841.11
Siskiyou	36,013.03	25,491.53	10,521.50
Solano	85,142.08	68,430.17	16,711.91
Sonoma	204,383.10	163,956.13	40,426.97
Stanislaus	151,524.14	98,020.00	53,504.14
Sutter	125,504.48	42,480.88	83,023.60
Tehama	138,601.82	92,778.15	45,823.67
Trinity	30,287.93	24,426.12	5,861.81
Tulare	297,385.37	262,496.45	34,888.92
Tuolumne	80,515.14	61,524.65	18,990.49
Ventura	210,136.97	131,127.10	79,009.87
Yolo	175,235.55	109,168.82	66,066.73
Yuba	85,092.49	43,472.76	41,619.73
Total	12,321,387.05	9,790,238.42	2,531,148.63
Expenditures for State roads and State highways	6,850,597.61	.....	.....
Grand total	[1]19,171,984.66	.....	.....

[1] Exclusive of San Francisco County which is coextensive with the city of San Francisco.

COLORADO.

TABLE 32.—*Revenue applied to roads and bridges, 1914.*

County.	Total revenue applied to roads and bridges.[1]	General county road and bridge tax.		Received from motor vehicle licenses.	State expenditure.	Received from forest reserve fund.
		Rate, mills per $1.	Amount.			
Adams	$42,005.03	1.5	$33,451.69	$423.90	$8,129.44	.....
Alamosa	11,778.95	1.5	10,055.13	244.38	1,479.44	.....
Arapahoe	26,378.05	1.25	20,737.74	420.60	5,219.71	.....
Archuleta	16,892.18	3	13,103.06	47.64	1,000.00	$2,741.48
Baca	2,939.40	.40	947.71	58.38	1,933.31	.....
Bent	18,443.28	1.34	15,092.65	365.66	2,984.97	.....
Boulder	78,859.59	1.64	65,666.40	1,604.79	11,348.50	239.90
Chaffee	20,500.57	1.26	14,701.74	372.84	3,828.25	1,597.74
Cheyenne	4,923.79	.50	3,861.80	61.99	1,000.00	.....
Clear Creek	14,597.84	2	10,538.60	110.84	3,558.18	390.22
Conejos	11,759.06	1.19	9,768.14	148.55	468.37	1,374.00
Costilla	15,597.26	2.45	13,404.56	87.43	2,054.57	50.70
Crowley	12,944.16	1.30	10,851.34	201.96	1,890.86	.....
Custer	8,303.43	2.50	6,457.45	60.21	1,463.97	321.80
Delta	33,058.02	2	30,232.67	400.91	1,500.00	924.44
Dolores	6,750.20	2.4	3,619.77	1.00	1,031.95	2,097.48
Douglas	43,036.27	1.8	17,270.28	139.11	25,212.27	414.61
Eagle	23,642.20	1.8	11,710.28	86.45	8,057.71	3,787.76
Elbert	20,135.60	1.7	17,621.73	125.61	2,388.26	.....
El Paso	74,145.19	.9	62,474.43	3,343.95	8,000.00	326.81
Fremont	60,892.30	2	40,221.67	769.61	19,783.02	118.00
Garfield	71,687.97	3.4	63,666.31	301.14	5,500.00	2,220.52
Gilpin	11,143.03	3	11,036.51	4.09	.....	102.43
Grand	13,499.90	1.75	8,937.45	63.96	1,418.47	3,080.02
Gunnison	39,720.93	2.3	33,646.77	165.90	2,500.00	3,408.26
Hinsdale	6,158.20	3	2,730.93	4.61	1,000.00	2,422.66
Huerfano	6,648.72	.5	6,118.44	229.88	.....	300.40
Jackson	13,254.44	2	7,898.03	43.72	2,884.64	2,428.05
Jefferson	54,006.75	2.25	46,207.23	455.62	7,100.00	243.90
Kiowa	5,136.37	.55	3,901.32	106.02	1,129.03	.....
Kit Carson	11,182.37	.9	9 023.13	159.24	2,000.00	.....
Lake	15,706.38	.48	6,569.22	167.50	8,433.40	536.26
La Plata	47,779.18	2.5	38,627.33	262.97	7,214.56	1,674.32
Larimer	111,085.29	2.55	87,922.49	2,164.93	20,026.90	970.97
Las Animas	47,818.67	1	39,493.96	649.62	7,631.29	43.80
Lincoln	15,206.61	1.2	11,975.41	181.98	3,049.22	.....
Logan	39,671.65	2	37,217.43	658.42	1,795.80	.....
Mesa	49,707.86	1.53	43,161.32	698.97	3 500.00	2,347.57
Mineral	7,925.24	1.9	3.267 01	16.69	2,004.41	2,537.13
Moffat	17,554.35	2	8,323.00	68.23	8,838.13	324.99
Montezuma	23,825.03	3	18,787.47	124.31	3,223.03	1,690.22
Montrose	50,345.48	3.1	45,112.69	353.76	3,500.00	1,379.03
Morgan	53,381.64	2.9	48,860.99	575.52	3,945.13	.....
Otero	74,590.87	2.55	71 155.27	944.45	2 491.15	.....
Ouray	17,279.16	2.5	14,326.19	63.48	2,290.98	598.51
Park	23,989.13	2	18,003.29	125.87	3,885.04	1,974.93
Phillips	5,987.76	.7	5,158.22	295.72	533.82	.....
Pitkin	20,065.24	1	6,912.52	30.61	11,010.38	2,111.73
Prowers	37,671.03	1.8	33 748.84	422.19	3 500.00	.....
Pueblo	102,697.12	1.4	92,078.47	2,122.26	8,424.86	71.53
Rio Blanco	23,270.77	2.66	12,859.96	65.81	8,861.45	1,483.55
Rio Grande	38,097.29	2	20,925.16	367.71	15,650.77	1,153.65
Routt	40,335.47	2.69	33,532.52	89.60	3,941.62	2,771.73
Saguache	37,063.95	2.8	32,519.12	224.09	1,750.82	2,569.92
San Juan	11,204.67	2	9,491.15	5.51	1,101.91	606.10
San Miguel	39,350.39	4	37,236.48	48.96	861.75	1,203.20
Sedgwick	14 006.10	2.1	12,333.39	172.71	1,500.00	.....
Summit	20,763.51	3	17,457.68	22.38	2,000.00	1,283.45
Teller	22,612.58	1.34	21,527.23	496.52	271.75	317.08
Washington	11,694.03	1	10,840.74	190.95	662.34	.....
Weld	108,854.91	1.3	99,327.55	2,441.18	7,086.18	.....
Yuma	11,326.32	1	9,948.85	377.47	1,000.00	.....
Total	1,920,888.73	.....	1,553,655.91	25,040.36	285,851.61	56,340.85
	[2] 15,423.00	.....	.....	.....	.....	.....
	[3] 1,234.50	.....	.....	.....	.....	.....
Grand total	1,937,546.23	.....	.....	.....	.....	.....

[1] Exclusive of Denver County, which is coextensive with the city of Denver.
[2] State appropriation for administration of State highway department.
[3] Expended from bond-issue fund in Garfield County.

IDAHO.

TABLE 33.—*Revenue applied to roads and bridges, 1914.*

County.	Total revenue applied to roads and bridges.	General county road and bridge tax.		Other revenue applied to roads and bridges.	
		Rate, mills per $1.	Amount.	Amount.	Source.
Ada	$41,664.95	7	$29,635.78	$6,973.00	Auto license.
				5,056.17	Special highway tax.
Adams [1]					
Bannock	49,071.03	1.5	37,301.51	11,769.52	Road poll tax.
Bear Lake	12,626.03	.8	11,251.03	1,375.00	Auto licenses.
Bingham	46,399.71		42,356.21	2,871.50	Road poll tax.
				1,172.00	Miscellaneous revenue.
Blaine	26,134.00	.6	26,134.00		
Boise	25,812.62		25,812.62		
Bonner	98,094.02	3	78,600.00	12,000.00	Forest department lumber sale.
				1,000.00	Auto licenses.
				494.02	Special highway tax.
				6,000.00	Saloon licenses.
Bonneville	7,400.00	2.5	7,400.00		
Canyon	58,539.48	1	24,222.76	34,316.72	Special road levy.
Cassia	16,647.43	2.5	16,647.43		
Clearwater	26,365.35	2.5	22,500.00	2,065.35	Special highway tax.
				1,370.00	Special road tax.
Custer	16,421.51	.35	11,721.87	3,329.64	Forest-reserve apportionments.
Elmore	15,461.89	.23	15,461.89		
Franklin	19,154.90	2.5	[2] 16,552.13	698.52	Forest-reserve apportionments.
				1,802.25	Motor vehicle tax.
				102.00	Miscellaneous revenue.
Fremont	15,944.03	.7	15,944.03		
Gooding	34,220.43	.6	21,783.60	12,436.83	Special highway tax.
Idaho	58,816.31	1	11,600.01	47,216.30	Special district levies.
Jefferson	5,257.00	5	3,250.00	1,806.00	Road poll tax.
Kootenai	101,419.56	3.5	86,970.95	14,448.61	Special highway tax.
Latah	62,174.68	1.6	33,363.40	28,811.28	Special road tax.
Lemhi	21,840.37	.3	15,278.32	2,051.80	Forest-reserve apportionments.
				1,416.00	Road poll tax.
				3,094.25	Unredeemed warrants.
Lewis	22,339.50	1.8		7,339.50	Special highway tax.
Lincoln	37,160.42		15,000.00	15,514.82	Do.
			21,021.60	624.00	Road poll tax.
Madison	4,000.00	.3	3,000.00	1,000.00	Do.
Minidoka	11,500.00	.7	4,000.00	7,500.00	Miscellaneous revenue.
Nez Perce	53,633.72	2	32,757.00	20,876.72	Special highway tax.
Oneida	13,700.00	.3	12,500.00	1,200.00	Auto licenses.
Power	24,300.00	3	24,300.00		
Shoshone	75,037.50	2	38,477.11	12,888.45	Road poll tax.
				5,064.00	State and county licenses.
				5,021.08	Forest-reserve apportionments.
				13,586.86	Miscellaneous revenue.
Twin Falls	60,992.75	2.5	39,216.62	4,594.80	Auto licenses.
				2,766.79	Road poll tax.
				14,414.54	Special highway tax.
Washington	35,528.28	3.1	32,541.00	1,977.00	Road poll tax.
				1,010.28	Special highway tax.
Total	1,095,656.47		776,600.87	319,055.60	
	[3] 226,000.00				
	[4] 49,812.12				
Grand total	1,371,468.59				

[1] No report.
[2] Includes poll tax.
[3] County and district road and bridge bonds.
[4] State expenditures on highways.

ILLINOIS.

TABLE 34.—*Revenue applied to roads and bridges, 1914.*

County.	Total revenue applied to roads and bridges.	Amounts obtained from general county and township tax.	Other revenue applied to roads.	
			Amount.	Source.
Adams	$113,985.05	$75,985.05	$38,000.00	State and county appropriation.
Alexander	80,314.07	80,314.07		
Bond	33,493.45	33,493.45		
Boone	60,127.00	50,127.00	10,000.00	County board appropriation.
Brown	23,000.00	23,000.00		
Bureau	117,700.50	114,000.00	3,700.50	Special township tax.
Calhoun	15,117.00	14,000.00	1,117.00	State aid.
Carroll	69,779.05	69,779.05		
Cass	45,000.00	45,000.00		
Champaign	160,000.00	160,000.00		
Christian	107,426.89	107,426.89		
Clark	94,245.11	43,340.23	50,904.88	Hard-road levies.
Clay	29,969.00	23,926.00	3,731.00	B. and O. appropriation.
			2,312.00	Cash poll tax.
Clinton	33,768.84	33,768.84		
Coles	72,257.72	72,257.72		
Cook	418,194.00	200,000.00	134,000.00	State aid.
			79,194.00	Special hard-road tax.
			5,000.00	County fund for highway superintendents.
Crawford	110,887.00	54,130.60	56,756.40	Hard-road tax.
Cumberland	32,669.61	29,570.61	3,099.00	State aid.
Dekalb	130,851.00	113,900.00	16,951.00	Special taxes and damages.
Dewitt	58,385.05	58,385.05		
Douglas	100,030.89	65,953.96	34,076.93	Special township tax for hard roads.
Dupage	100,161.40	91,888.54	8,272.86	Special township hard-road tax.
Edgar	205,458.11	85,797.20	116,660.91	Hard-road tax.
			3,000.00	County bridge money.
Edwards	12,000.00	12,000.00		
Effingham	36,743.40	36,743.40		
Fayette	28,587.91	13,187.91	7,700.00	State aid.
			7,700.00	County appropriation.
Ford	70,099.50	65,300.00	4,799.50	Special gravel tax.
Franklin	47,899.52	47,899.52		
Fulton	101,681.66	100,221.66	1,460.00	Poll tax from townships.
Gallatin	17,523.23	17,523.23		
Greene	48,178.33	46,057.33	2,121.00	County appropriation to three townships.
Grundy	55,275.00	55,275.00		
Hamilton	24,637.00	21,637.00	3,000.00	Cash poll tax.
Hancock	85,683.98	85,683.98		
Hardin	4,283.50	4,120.44	163.06	County dog-tax appropriation.
Henderson	39,451.26	38,779.41	671.85	Cash poll tax.
Henry	100,680.30	100,680.30		
Iroquois	177,689.58	164,345.52	13,344.06	Hard-road tax.
Jackson	50,202.76	43,327.76	6,875.00	Special levy fund.
Jasper	33,831.84	33,831.84		
Jefferson[1]	39,606.02	39,606.02		
Jersey	25,490.43	24,362.86	1,127.57	Road and ditch damages.
Jo Daviess	66,876.47	63,656.00	1,613.49	Road and bridge drainage rates.
			1,606.98	Road and bridge special tax.
Johnson	15,532.00	15,532.00		
Kane	120,514.97	118,000.72	2,514.25	Special hard-road tax.
Kankakee	122,409.34	77,319.15	32,983.31	Hard-road tax.
			12,106.88	Refund railroad-bond tax.
Kendall	52,521.29	37,542.02	11,479.46	Special gravel tax.
			3,499.81	New road damages and poll tax
Knox	86,494.44	84,371.49	2,122.95	Road and ditch damages.
Lake	152,221.73	112,343.63	39,878.10	Special township gravel tax.
La Salle	241,864.00	208,974.00	32,890.00	Hard-road township tax.
Lawrence	111,150.71	57,611.00	6,600.00	State aid.
			46,939.71	Special road tax.
Lee	89,357.00	89,357.00		
Livingston	138,959.00	138,959.00		
Logan	90,886.62	90,886.62		
McDonough	65,651.00	65,651.00		
McHenry	122,607.33	95,607.33	27,000.00	State aid.
McLean	212,330.66	212,330.66		
Macon[1]	128,939.83	128,939.83		
Macoupin	89,600.70	89,600.70		
Madison	167,710.66	126,026.96	41,683.70	Special township tax levy.
Marion	61,810.43	44,873.88	7,084.00	State aid.
			9,852.55	County appropriation.
Marshall	49,495.00	49,495.00		
Mason	44,148.00	44,148.00		
Massac	26,224.12	26,224.12		

ILLINOIS—Continued.

TABLE 34.—*Revenue applied to roads and bridges, 1914*—Continued.

County.	Total revenue applied to roads and bridges.	Amounts obtained from general county and township tax.	Other revenue applied to roads.	
			Amount.	Source.
Menard	$32,653.60	$29,016.66	$3,637.00	State aid.
Mercer	64,389.43	64,389.43	.....	
Monroe	28,331.61	24,660.00	2,667.00	Poll tax.
			1,004.61	Donated by county.
Montgomery	84,337.59	84,337.59	.....	
Morgan	77,980.26	77,980.26	.....	
Moultrie	41,779.12	41,779.12	.....	
Ogle	125,630.00	125,630.00	.....	
Peoria[1]	168,054.60	168,054.60	.....	
Perry	37,906.40	37,906.40	.....	
Piatt	62,805.63	62,805.63	.....	
Pike	57,875.80	57,875.80	.....	
Pope	14,565.00	11,025.00	3,540.00	Poll tax.
Pulaski	12,883.00	9,642.00	3,241.00	Special hard-road tax.
Putnam[1]	19,981.93	19,981.93	.....	
Randolph	45,238.90	45,238.90	.....	
Richland[1]	25,788.92	25,788.92	.....	
Rock Island	47,100.41	38,147.55	6,854.96	Railway tax.
			2,097.90	Special hard-road tax.
St. Clair	89,681.00	86,911.00	2,770.00	Special township taxes.
Saline	65,402.35	65,402.35	.....	
Sangamon	142,641.98	142,641.98	.....	
Schuyler	37,183.27	37,183.27	.....	
Scott	33,720.00	33,720.00	.....	
Shelby	98,485.39	98,485.39	.....	
Stark	43,875.00	43,875.00	.....	
Stephenson	95,728.00	75,032.00	10,348.00	State aid.
			10,348.00	County appropriation.
Tazewell	87,227.00	87,227.00	.....	
Union	28,250.00	28,250.00	.....	
Vermilion	191,843.00	191,843.00	.....	
Wabash[1]	21,996.02	21,996.02	.....	
Warren	74,619.59	74,619.59	.....	
Washington	44,250.00	35,000.00	4,850.00	County appropriation for bridges.
			4,400.00	Township hard roads.
Wayne	361,600.00	361,600.00	.....	
White	54,265.00	37,400.00	4,165.00	Poll tax.
			12,700.00	Special hard-road tax.
Whiteside	94,912.00	94,912.00	.....	
Will	202,485.40	202,485.40	.....	
Williamson[1]	42,048.59	42,048.59	.....	
Winnebago	137,741.23	137,741.23	.....	
Woodford	54,642.08	54,642.08	.....	
Total	8,419,570.36	7,451,353.18	968,217.18	
	[2] 106,287.00			
	[3] 208,855.41			
Grand total.	8,734,712.77			

[1] For 1913; information not available for 1914.
[2] Expended from State appropriation for administration, engineering, and miscellaneous equipment by State highway department.
[3] Expended from local bond funds.

INDIANA.

TABLE 35.—*Revenue applied to roads and bridges, 1914.*

County.	Total revenue applied to roads.	General county tax for road repairs.		Road tax.[1]	Additional road tax.	Receipts from motor vehicle licenses.	Statute labor, cash value.
		Rate, cents per $100.	Amount.				
Adams	$52,237.95	.199	$32,251.96	$3,271.35	$7,725.42	$5,816.10	$3,173.12
Allen	134,601.05	.06	38,092.49	27,866.38	25,671.26	10,341.45	32,629.47
Bartholomew	62,363.61	.15	30,167.19	12,436.39	.....	5,373.27	14,386.76
Benton	56,113.68	.10	20,675.70	17,576.92	.....	6,310.12	11,550.94
Blackford	36,989.22	.20	20,309.38	8,809.52	.....	3,850.92	4,019.40
Boone	90,703.06	.16	49,517.76	19,105.28	.....	6,714.09	15,365.93
Brown	9,693.49	.03	691.82	1,503.49	1,975.22	1,859.73	3,663.23
Carroll	52,998.59	.159	22,754.18	11,756.45	.....	5,473.27	13,014.69
Cass	75,917.95	.14	29,148.53	12,522.57	10,261.04	7,189.94	16,795.87
Clark	38,490.97	.12	17,041.23	6,558.71	6,293.43	3,113.03	5,484.57
Clay	33,986.56	.12	19,171.61	8,582.74	.....	4,572.74	1,659.47
Clinton	13,673.42	.10	.....	3,100.23	.....	9,406.30	1,166.89
Crawford	9,919.13	.07	1,862.71	1,657.63	967.92	1,999.64	3,431.23
Daviess	44,096.23	.20	28,692.81	8,119.46	.....	3,194.04	4,089.92
Dearborn	31,945.92	.059	6,000.24	11,654.44	422.02	2,657.06	11,212.16
Decatur	59,716.59	.204	33,847.97	11,642.87	.....	4,661.52	9,564.23
Dekalb	55,491.22	.....	.....	18,631.06	11,609.57	3,689.95	21,560.64
Delaware	75,789.99	.069	22,145.30	26,840.27	.....	6,820.48	19,983.94
Dubois	20,038.33	.079	6,972.93	6,934.83	.....	2,466.09	3,664.48
Elkhart	52,747.85	.....	.....	14,554.36	11,891.01	5,954.14	20,348.34
Fayette	29,916.42	.005	621.93	11,940.91	.....	3,032.79	14,320.79
Floyd	11,819.83	.02	2,437.16	4,060.78	.....	2,360.54	2,961.35
Fountain	64,510.63	.15	22,827.18	7,551.91	11,108.26	4,911.49	18,111.79
Franklin	41,136.91	.135	12,646.85	3,042.26	6,571.58	3,265.26	15,610.96
Fulton	49,651.15	.059	7,757.34	20,332.93	.....	3,523.75	18,037.13
Gibson	48,146.28	.10	18,660.78	11,307.98	10,187.95	3,716.54	4,273.03
Grant	112,948.02	.30	91,404.13	6,248.00	.....	9,093.55	6,202.34
Greene	72,205.91	.309	47,285.08	4,144.08	11,135.99	5,197.82	4,442.94
Hamilton	82,313.08	.25	51,239.41	4,796.92	12,955.03	7,244.35	6,077.37
Hancock	70,003.30	.129	24,609.83	21,892.49	.....	4,480.92	19,020.06
Harrison	25,167.55	.14	8,944.31	3,446.41	3,930.36	2,724.96	6,121.51
Hendricks	68,115.09	.08	15,606.59	12,441.73	14,799.76	4,314.34	20,952.67
Henry	83,703.65	.11	27,359.64	25,819.87	.....	5,377.43	25,146.71
Howard	45,933.18	.099	22,672.27	9,786.82	.....	7,301.95	6,172.14
Huntington	78,833.34	.159	34,400.71	19,388.20	.....	6,526.82	18,517.61
Jackson	42,926.13	.20	30,511.30	4,591.71	.....	5,647.39	2,175.73
Jasper	51,292.75	.125	15,775.16	10,102.76	9,408.01	4,019.35	11,987.47
Jay	68,128.52	.13	22,085.78	13,430.46	12,419.46	5,488.75	14,704.07
Jefferson	31,722.26	.16	14,876.57	2,569.46	3,495.67	3,041.25	7,739.31
Jennings	28,920.21	.159	10,192.38	4,867.84	4,127.08	3,340.80	6,392.11
Johnson	57,912.00	.149	27,511.97	4,287.55	8,816.70	4,493.73	12,802.05
Knox	58,407.24	.15	39,038.75	939.06	11,750.89	6,431.19	247.35
Kosciusko	65,199.99	.01	2,370.42	17,134.72	12,038.99	3,859.38	29,796.48
Lagrange	31,894.58	.....	.....	6,860.66	9,539.04	3,234.69	12,260.19
Lake	128,883.51	.10	72,533.47	47,054.41	.....	9,295.63	.....
Laporte	74,881.34	.10	35,518.52	16,847.75	10,785.06	5,442.21	6,287.80
Lawrence	46,384.45	.25	35,098.59	5,162.56	581.56	5,292.05	249.69
Madison	77,237.09	.10	36,661.67	19,269.72	.....	9,849.28	11,457.02
Marion	182,201.20	.044	115,346.59	11,843.62	22,768.08	22,138.91	10,104.00
Marshall	44,131.03	.01	1,867.02	12,574.24	9,420.27	3,679.17	16,590.33
Martin	17,578.60	.10	4,433.42	5,754.08	.....	2,271.40	5,119.70
Miami	58,845.14	.10	19,254.38	11,349.03	10,190.96	5,657.71	12,393.06
Monroe	38,298.97	.25	26,491.19	3,441.27	684.07	4,191.79	3,490.65
Montgomery	50,074.14	.1075	.....	24,758.48	.....	7,190.94	18,124.72
Morgan	47,526.85	.11	14,637.34	28,890.04	.....	3,999.47	.....
Newton	55,191.21	.20	27,103.28	14,229.49	.....	4,845.98	9,012.46
Noble	48,697.26	.....	.....	16,296.17	10,765.62	3,447.84	18,187.63
Ohio	14,441.64	.40	8,023.31	389.27	1,339.70	2,105.77	2,583.59
Orange	33,683.84	.27	17,191.47	9,483.23	.....	3,655.89	3,353.25
Owen	32,105.28	.23	15,455.61	7,261.82	.....	3,296.31	6,091.54
Parke	53,104.07	.25	36,811.05	6,283.72	.....	6,542.98	3,466.32
Perry	12,057.52	.02	803.86	3,460.56	387.98	1,828.42	5,576.70
Pike	21,775.90	.07	5,012.25	3,268.25	5,669.58	2,387.89	5,437.93
Porter	72,517.14	.20	44,193.50	6,732.46	15,507.17	4,617.72	1,466.29
Posey	39,682.80	.12	18,478.76	4,665.78	10,362.15	3,514.87	2,661.24
Pulaski	38,011.40	.109	10,292.11	7,190.23	7,789.21	4,094.90	8,644.95
Putnam	62,332.93	.2465	43,658.08	3,971.79	2,308.94	7,347.27	5,046.85
Randolph	81,803.51	.15	34,920.07	7,387.27	17,572.86	6,390.55	15,532.76
Ripley	39,909.49	.20	15,480.90	9,518.27	.....	3,718.78	11,191.54

[1] This includes township tax, road tax, and work road tax which is paid in cash; the township tax rate varies in every county and in every township in the county.

INDIANA—Continued.

TABLE 35.—*Revenue applied to roads and bridges, 1914*—Continued.

County.	Total revenue applied to roads.	General county tax for road repairs.		Road tax.[1]	Additional road tax.	Receipts from motor vehicle licenses.	Statute labor, cash value.
		Rate, cents per $100.	Amount.				
Rush	$78,274.68	.12	$25,084.19	$25,056.62	.....	$5,078.78	$23,055.09
St. Joseph	54,411.67	.02	9,982.52	17,716.27	$9,827.31	6,982.73	9,902.84
Scott	17,344.03	.14	5,353.03	2,821.78	2,235.76	2,633.74	4,299.72
Shelby	72,562.50	.09	21,310.96	6,920.03	14,868.57	5,079.48	24,383.46
Spencer	34,028.37	.....	13,542.54	10,393.92	.....	2,060.01	8,031.90
Starke	52,599.36	.30	24,556.45	13,686.05	6,840.77	3,914.50	3,601.59
Steuben	31,534.91	.....	.....	17,800.58	.....	3,174.81	10,559.52
Sullivan	72,497.40	.20	38,640.03	5,215.69	19,866.21	5,461.35	3,314.12
Switzerland	14,341.09	.125	4,184.93	4,118.66	.....	2,672.94	3,364.56
Tippecanoe	67,308.60	.089	32,252.80	5,777.29	9,978.33	8,799.23	10,500.95
Tipton	30,106.15	.16	23,422.31	.36	.62	6,682.86	.....
Union	28,992.13	.10	6,651.43	4,142.60	5,547.22	2,947.89	9,702.99
Vanderburg	52,451.48	.055	27,633.26	5,855.76	9,743.76	5,592.63	3,626.07
Vermilion	45,972.53	.2215	31,625.76	9,349.63	25.51	4,868.88	102.75
Vigo	63,633.68	.06	32,224.28	20,340.02	.....	7,140.98	3,928.40
Wabash	68,430.50	.129	27,175.21	21,565.09	.....	5,986.26	13,703.94
Warren	47,121.30	.15	20,008.55	13,641.48	.....	4,742.12	8,729.15
Warrick	20,674.72	.02	1,702.19	2,892.66	6,633.44	2,183.54	7,262.89
Washington	41,018.01	.20	16,704.56	6,276.45	3,531.86	3,459.31	11,045.83
Wayne	80,485.74	.07	24,408.41	28,394.79	.....	6,387.25	21,295.29
Wells	51,149.60	.24	42,221.14	258.38	1,289.55	7,380.53	.....
White	59,492.64	.15	22,511.74	31,555.93	.....	5,424.97	.....
Whitley	53,688.12	.01	1,475.16	13,665.25	11,351.80	3,259.64	23,936.27
Total	4,837,798.95	.....	2,022,117.24	1,018,639.26	446,975.58	462,811.08	887,255.79
	[2] 8,989,570.98						
	[3] 406,616.00						
Grand total	14,233,985.93						

[1] This includes township tax, road tax, and work road tax which is paid in cash; the township tax rate varies in every county and in every township in the county.
[2] Expended from township bonds.
[3] Expended from county bonds.

TABLE 36.—*Revenue applied to roads and bridges, 1914.*

County.	Total revenue applied to roads and bridges.	General county and township tax.		Other revenues applied to roads.			Statute labor revenue.			
		Bridge revenue.	Road revenue.	Source.			Number of men who worked out labor tax.	Average number of days worked.	Daily wage.	Cash value statute labor.
				Township drag tax.	Motor tax.	Poll tax.[1]				
Adair	$94,321.30	$32,832.85	$28,136.83	$18,589.02	$9,753.60	$1,819.00	638	2	$2.50	$3,190.00
Adams	65,960.77	27,791.75	27,194.24	3,731.12	5,852.16	1,391.50	.....	2	2.50	.....
Allamakee	89,886.24	35,022.35	35,566.65	5,100.50	8,778.24	2,173.50	649	2	2.50	3,245.00
Appanoose	75,655.31	26,713.81	26,078.20	8,426.56	8,778.24	3,558.50	420	2	2.50	2,100.00
Audubon	86,744.37	33,269.05	37,620.31	5,927.35	5,852.16	1,445.50	526	2	2.50	2,630.00
Benton	147,568.27	62,009.60	58,825.73	10,327.34	9,753.60	3,212.00	688	2	2.50	3,440.00
Black Hawk	111,597.92	32,371.79	37,554.24	23,912.15	8,778.24	6,126.50	571	2	2.50	2,855.00
Boone	96,771.44	30,677.22	35,598.40	15,921.26	8,290.56	3,379.00	581	2	2.50	2,905.00
Bremer	83,688.77	37,330.00	31,781.13	5,724.62	6,827.52	2,025.50	.....	.....	.....	.....
Buchanan	108,502.42	40,551.93	47,511.06	6,537.05	7,802.88	2,414.50	737	2	2.50	3,685.00
Buena Vista	120,053.25	50,285.59	47,470.75	8,310.67	8,778.24	2,133.00	615	2	2.50	3,075.00
Butler	111,345.74	43,749.23	55,449.13	.....	7,802.88	2,149.50	439	2	2.50	2,195.00
Calhoun	88,557.18	32,796.40	35,017.91	8,360.31	8,290.56	2,062.00	406	2	2.50	2,030.00
Carroll	117,352.77	49,004.52	58,681.37	.....	7,802.88	1,864.00	.....	.....	.....	.....
Cass	113,301.85	46,759.77	54,360.20	.....	7,802.88	2,454.00	385	2	2.50	1,925.00
Cedar	110,587.80	37,238.09	52,700.03	9,140.62	8,290.56	2,313.50	181	2	2.50	905.00
Cerro Gordo	108,192.30	49,149.81	40,918.42	6,780.69	7,802.88	3,540.50	.....	.....	.....	.....
Cherokee	116,341.42	56,175.48	42,206.89	6,070.17	7,802.88	1,736.00	470	2	2.50	2,350.00
Chickasaw	75,586.59	33,642.25	28,558.60	5,651.58	5,852.16	1,882.00	.....	.....	.....	.....
Clarke	55,899.76	23,761.94	19,327.00	4,035.66	5,852.16	1,423.00	300	2	2.50	1,500.00
Clay	92,927.48	39,528.39	35,404.81	6,890.90	7,802.88	1,465.50	367	2	2.50	1,835.00
Clayton	116,881.56	51,176.51	40,174.39	8,443.30	10,728.96	3,238.50	624	2	2.50	3,120.00
Clinton	145,221.03	51,132.90	46,293.10	33,006.43	9,753.60	3,860.00	235	2	2.50	1,175.00
Crawford	158,904.43	62,202.22	69,828.80	11,449.13	10,241.28	2,343.00	568	2	2.50	2,840.00
Dallas	109,530.51	51,468.76	37,342.24	8,259.63	7,802.88	2,997.00	332	2	2.50	1,660.00
Davis	60,246.93	20,520.16	29,845.07	.....	7,315.20	1,716.50	170	2	2.50	850.00
Decatur	77,397.17	24,010.13	25,979.38	15,414.89	7,802.88	1,784.89	481	2	2.50	2,405.00
Delaware	105,873.15	42,248.16	38,168.58	14,293.03	7,802.88	2,095.50	253	2	2.50	1,265.00
Des Moines	68,353.27	14,756.50	42,042.75	.....	6,827.52	2,711.50	403	2	2.50	2,015.00
Dickinson	53,839.90	23,862.27	19,188.92	3,859.55	5,852.16	1,077.00	.....	.....	.....	.....
Dubuque	122,577.14	39,904.32	59,059.75	6,877.83	8,778.24	7,957.00	.....	.....	.....	.....
Emmet	55,876.83	15,693.86	27,759.29	4,274.52	5,852.16	1,002.00	259	2	2.50	1,295.00
Fayette	148,823.33	55,906.93	66,496.26	9,118.04	9,753.60	3,468.50	816	2	2.50	4,080.00
Floyd	101,609.11	41,193.44	48,321.33	.....	6,339.84	2,494.50	652	2	2.50	3,260.00

Franklin	82,748.60	32,582.11	30,473.28	7,908.33	7,802.88	1,687.00	459	2	2.50	2,295.00
Fremont	101,764.47	46,224.87	32,578.66	13,207.10	6,339.84	1,914.00	300	2	2.50	1,500.00
Greene	99,606.70	35,085.32	46,257.94	7,604.06	7,802.88	1,926.50	186	2	2.50	930.00
Grundy	98,933.31	38,347.79	50,566.00	.....	6,827.52	1 682.00	302	2	2.50	1,510.00
Guthrie	100,730.30	33,023.22	48,082.85	7,154.67	8,290.56	2,119.00	412	2	2.50	2,060.00
Hamilton	133,781.39	37,947.71	76,326.53	7,557.77	7,802.88	2,336.50	362	2	2.50	1,810.00
Hancock	70,250.71	27,588.96	26,494.70	5,843.17	7,802.88	1,626.00	179	2	2.50	895.00
Hardin	110,417.03	51,834.62	38,010.07	8,128.78	8,290.56	2,578.00	315	2	2.50	1,575.00
Harrison	127,480.44	49,173.17	54,904.21	8,097.96	9,753.60	2,801.50	550	2	2.50	2,750.00
Henry	66,180.55	14,540.03	30,180.58	11,784.78	5,852.16	2,248.00	315	2	2.50	1,575.00
Howard	74,587.46	28,640.10	31,841.54	4,857.66	5,852.16	1,526.00	374	2	2.50	1,870.00
Humboldt	80,356.08	34,165.93	30,055.28	6,168.35	6,827.52	1,329.00	362	2	2.50	1,810.00
Ida	74,815.97	30,083.58	30.332.93	6,200.80	5,852.16	1,321.50	205	2	2.50	1,025.00
Iowa	126,140.08	49,139.70	37,062.31	25,958.33	8,778.24	2,231.50	594	2	2.50	2,970.00
Jackson	107,089.69	41,656.77	46,960.05	6,808.13	8,778.24	2,356.50	226	2	2.50	1,130.00
Jasper	153,185.43	62,335.81	46,508.72	31,422.98	9,265.92	3,652.00	.....	.....	.....	.....
Jefferson	76,220.78	34,123.88	25,875.23	5,649.01	5,852.16	2,160.50	512	2	2.50	2,560.00
Johnson	126,171.16	58,894.00	40,538.95	8,905.43	10,241.28	2,936.50	931	2	2.50	4,655.00
Jones	105,861.68	38,552.35	40,428.61	14,674.16	8,290.56	2,246.00	334	2	2.50	1,670.00
Keokuk	117,722.01	43,798.73	53.641.04	8,160.68	8,290.56	2,746.00	217	2	2.50	1,085.00
Kossuth	167,024.80	69,259.10	48,485.83	30,611.33	13,655.04	2,623.50	478	2	2.50	2,390.00
Lee	108,576.00	41,546.78	41,427.65	14,178.01	8,290.56	3,133.00	.....	.....	.....	.....
Linn	140,336.92	40,743.23	62,916.84	18,866.75	9,753.60	8,056.50	.....	.....	.....	.....
Louisa	75,113.01	22,386.27	36,192.33	5,232.25	5,852.16	3,090.00	472	2	2.50	2,360.00
Lucas	59,394.57	19,489.28	21,228.64	11,225.99	5,852.16	1,598.50	.....	.....	.....	.....
Lyon	74,947.80	26,245.65	28,087.36	8,748.55	8,778.24	1,513.00	315	2	2.50	1,575.00
Madison	101,272.38	33,224.84	35,109.14	20,502.02	7,802.88	1,958.50	535	2	2.50	2,675.00
Mahaska	132,010.61	52,989.60	63,537.59	.....	9,265.92	3,687.50	506	2	2.50	2,530.00
Marion	109,195.02	44,096.00	45,672.36	6,097.96	7,315.20	3,023.50	598	2	2.50	2,990.00
Marshall	137,785.38	45,306.02	46,395.92	33,055.20	8,778.24	3,390.00	172	2	2.50	860.00
Mills	71,062.37	32,751.78	23,439.96	5,955.29	6,339.84	1,705.50	174	2	2.50	870.00
Mitchell	87,983.79	37,187.01	33,082.09	5,370.31	7,802.88	1,871.50	534	2	2.50	2,670.00
Monona	103,612.50	41,720.02	41,426.56	7,308.00	9,265.92	2,012.00	376	2	2.50	1,880.00
Monroe	59,524.71	19,797.60	25,895.17	3,699.28	5,852.16	3,330.50	190	2	2.50	950.00
Montgomery	89,201.11	37,070.16	24,464.26	17,482.03	5,852.16	2,037.50	459	2	2.50	2,295.00
Muscatine	81,119.83	37,985.24	31,092.89	.....	7,315.20	2,201.50	505	2	2.50	2,525.00
O'Brien	98,930.10	49,518.99	29,003.44	8,376.61	8,290.56	2,005.50	347	2	2.50	1,735.00
Osceola	68,815.41	27,314.48	29,084.45	4,547.82	5,852.16	1,076.50	188	2	2.50	940.00
Page	117,835.30	47,797.06	42,655.16	14,965.20	7,802.88	2,890.00	345	2	2.50	1,725.00
Palo Alto	80,921.02	26,898.37	38,249.38	5,710.39	7,802.88	.....	452	2	2.50	2,260.00
Plymouth	140,893.27	54,975.31	30,682.63	36,478.01	11,704.32	2,293.00	952	2	2.50	4,760.00
Pocahontas	115,238.28	50,080.71	45,789.39	7,341.26	9,265.92	1,766.00	199	2	2.50	995.00
Polk	134,702.15	35,693.27	74,187.17	.....	10,728.96	13,417.75	135	2	2.50	675.00
Pottawattamie	184,867.72	67,546.59	82,737.61	12,302.48	13,655.04	4,006.00	924	2	2.50	4,620.00
Poweshiek	129,055.69	52,504.68	57,716.74	8,574.89	7,802.88	2,456.50	.....	.....	.....	.....
Ringgold	74,194.80	27,882.51	36,946.41	.....	7,802.88	1,563.00	.....	.....	.....	.....
Sac	122,583.76	44,442.67	57,004.63	8,544.08	7,802.88	1,879.50	582	2	2.50	2,910.00
Scott	89,233.71	42,398.61	25,244.75	6,944.97	7,802.88	4,722.50	424	2	2.50	2,120.00
Shelby	122,659.52	48,553.24	63,066.90	.....	7,802.88	1,941.50	259	2	2.50	1,295.00
Sioux	102,415.29	27,194.56	46,118.64	12,036.45	11,216.64	2,849.00	600	2	2.50	3,000.00
Story	116,091.67	37,913.54	57,107.10	7,915.15	7,802.88	3,033.00	464	2	2.50	2,320.00

[1] The amounts shown in this column are the computed levies, based on number of men on eligible poll tax.

TABLE 36.—*Revenue applied to roads and bridges, 1914*—Continued.

County.	Total revenue applied to roads and bridges.	General county and township tax.		Other revenues applied to roads.			Statute labor revenue.			
		Bridge revenue.	Road revenue.	Source.			Number of men who worked out labor tax.	Average number of days worked.	Daily wage.	Cash value statute labor.
				Township drag tax.	Motor tax.	Poll tax.[1]				
Tama	$153,174.42	$62,013.59	$74,700.55	.....	$10,241.28	$2,499.00	744	2	$2.50	$3,720.00
Taylor	96,284.30	35,630.14	42,668.35	$6,167.75	8,290.56	2,137.50	278	2	2.50	1,390.00
Union	71,554.95	24,560.48	30,744.34	4,869.61	6,827.52	1,738.00	563	2	2.50	2,815.00
Van Buren	63,515.97	22,337.20	22,583.83	8,321.92	6,827.52	1,940.50	301	2	2.50	1,505.00
Wapello	76,456.26	30,456.38	28,258.84	5,110.52	6,827.52	4,523.00	256	2	2.50	1,280.00
Warren	91,953.81	28,990.19	37,464.99	14,088.07	8,290.56	795.00	465	2	2.50	2,325.00
Washington	116,190.39	42,046.43	52,893.33	8,875.43	7,315.20	2,520.00	508	2	2.50	2,540.00
Wayne	61,628.34	12,809.81	31,621.41	5,146.24	7,802.88	2,078.00	434	2	2.50	2,170.00
Webster	139,659.77	37,491.60	71,167.69	9,657.16	11,704.32	4,104.00	1,107	2	2.50	5,535.00
Winnebago	51,340.19	9,881.00	20,102.56	12,061.47	5,852.16	1,448.00	399	2	2.50	1,995.00
Winneshiek	115,345.32	50,227.50	44,874.67	7,848.05	9,753.60	2,641.50	.....	2	2.50	.....
Woodbury	179,800.70	72,417.03	77,340.18	9,415.17	11,704.32	6,379.00	509	2	2.50	2,545.00
Worth	49,502.59	17,590.41	17,516.13	4,323.71	6,339.84	1,147.50	517	2	2.50	2,585.00
Wright	119,880.67	51,853.38	48,926.90	7,767.15	8,778.24	.....	511	2	2.50	2,555.00
Total	10,113,507.32 [2] 74,000.00	3,843,294.94	4,128,493.90	896,248.60	801,258.24	255,821.64	.....	.....	.....	188,390.00
Grand total	10,187,507.32									

[1] The amounts shown in this column are the computed levies, based on number of men on eligible poll tax.
[2] State fund applied to educational and supervisory work by the State Highway Department.

KANSAS.

TABLE 37.—*Revenue applied to roads and bridges, 1914.*

County.	Total county and township revenue applied to roads and bridges.	Combined county and township road and bridge tax.		Other revenue applied to roads and bridges.	
		Average rate, cents per $100.	Amount.	Source.	
				Auto fees.	Poll tax.
Allen	$73,178	24	$64,346	$1,587	$7,245
Anderson	46,668	15	38,057	640	7,971
Atchison	93,552	19	83,751	2,116	7,685
Barber	50,215	22	45,239	1,316	3,660
Barton	44,796	9	36,231	2,915	5,650
Bourbon	76,666	22	68,230	1,166	7,270
Brown	119,813	26	108,876	3,217	7,720
Butler	90,694	13	78,486	2,373	9,835
Chase	51,073	23.9	46,553	1,085	3,435
Chautauqua	49,343	29	43,775	968	4,600
Cherokee	70,361	22	60,185	1,316	8,860
Cheyenne	10,600	13	8,674	366	1,560
Clark	13,922	9	11,366	491	2,065
Clay	75,688	21.8	66,813	2,280	6,595
Cloud	95,655	23.9	85,333	3,532	6,790
Coffey	76,193	28	68,361	1,147	6,685
Comanche	18,059	14	15,373	651	2,035
Cowley	109,864	19	98,135	2,699	9,030
Crawford	104,564	20	88,461	2,423	13,680
Decatur	19,485	15	15,723	412	3,350
Dickinson	85,651	17	74,393	3,393	7,865
Doniphan	64,464	22	55,993	1,596	6,875
Douglas	51,602	12.3	44,939	1,298	5,365
Edwards	22,357	12	17,776	1,466	3,115
Elk	36,391	21	30,886	515	4,990
Ellis	44,715	21.9	40,881	679	3,155
Ellsworth	40,497	14	35,639	1,808	3,050
Finney	12,136	8	9,419	642	2,075
Ford	43,532	16.8	37,257	1,500	4,775
Franklin	83,741	22.2	74,517	1,839	7,385
Geary	44,226	24.4	41,739	1,282	1,205
Gove	5,421	4	3,269	177	1,975
Graham	29,253	25	25,686	402	3,165
Grant	1,006	2	441	50	515
Gray	10,878	10.6	9,295	293	1,290
Greeley	785	.6	202	73	510
Greenwood	76,517	9.6	68,467	1,260	6,790
Hamilton	6,909	19	5,819	185	905
Harper	40,722	11.7	33,973	1,774	4,975
Harvey	61,930	15	54,949	2,086	4,895
Haskell	4,062	9.7	3,419	93	550
Hodgeman	13,855	16	11,990	255	1,610
Jackson	75,082	22.2	66,154	1,453	7,475
Jefferson	100,603	29	91,450	1,363	7,790
Jewell	120,796	28	108,400	3,034	9,362
Johnson	110,556	15.1	101,317	1,584	7,655
Kearney	9,672	14.9	8,282	155	1,235
Kingman	53,318	15.4	46,136	1,742	5,440
Kiowa	24,840	13.6	21,674	896	2,270
Labette	70,115	11.4	60,683	1,807	7,625
Lane	2,767	2.1	1,305	242	1,220
Leavenworth	93,558	2	84,387	1,701	7,470
Lincoln	44,547	17.2	37,887	2,025	4,635
Linn	64,425	28.4	57,028	837	6,560
Logan	14,918	17	12,898	220	1,800
Lyon	97,503	21	87,129	1,924	8,450
McPherson	62,036	11	50,771	3,435	7,830
Marion	63,195	13.2	52,965	2,815	7,415
Marshall	90,408	16	78,362	2,241	9,805
Meade	25,914	23	23,417	552	1,945
Miami	83,004	23.5	73,051	1,418	8,535
Mitchell	64,599	18.7	55,649	2,950	6,000
Montgomery	98,984	14	85,498	3,336	10,150
Morris	55,051	22.3	48,525	1,136	5,390
Morton [1]	955	.....	.....	140	815
Nemaha	102,529	26	92,470	2,074	7,985
Neosho	54,705	15.4	46,325	1,980	6,400
Ness	10,863	7.6	7,790	443	2,630
Norton	31,739	16.8	26,595	724	4,420
Osage	100,292	27.8	90,673	1,289	8,330

[1] No report.

KANSAS—Continued.

TABLE 37.—*Revenue applied to roads and bridges, 1914*—Continued.

County.	Total county and township revenue applied to roads and bridges.	Combined county and township road and bridge tax.		Other revenue applied to roads and bridges.	
		Average rate, cents per $100.	Amount.	Source.	
				Auto fees.	Poll tax.
Osborne	$48,713	16.7	$42,272	$1,821	$4,620
Ottawa	46,050	14.2	38,594	2,221	5,235
Pawnee	33,194	11.2	28,012	1,637	3,545
Phillips	70,211	29.1	62,283	1,468	6,460
Pottawatomie	87,846	25.7	78,646	1,650	7,550
Pratt	31,702	9.4	25,588	2,204	3,910
Rawlins	9,216	8	6,174	427	2,615
Reno	106,121	11.6	89,938	6,268	9,915
Republic	82,927	18.3	72,326	2,601	8,000
Rice	42,529	9.7	33,980	2,984	5,565
Riley	63,515	19.1	55,563	2,407	5,545
Rooks	51,451	23.9	45,661	1,525	4,265
Rush	19,497	9.2	14,895	1,052	3,550
Russell	51,622	18.3	45,472	1,480	4,670
Saline	48,882	9	39,312	3,235	6,335
Scott	2,103	1.8	930	233	940
Sedgwick	99,497	7.7	88,726	2,788	7,983
Seward	5,939	5.9	4,088	296	1,555
Shawnee	134,401	13.7	119,941	6,020	8,440
Sheridan	8,391	7.3	6,024	212	2,155
Sherman	15,488	15.6	13,751	422	1,315
Smith	71,023	22.2	60,781	2,587	7,655
Stafford	39,432	12.9	32,873	2,374	4,185
Stanton	2,891	14	2,231	70	590
Stevens	1,729	.9	328	131	1,270
Sumner	64,945	9.4	51,180	3,525	10,240
Thomas	9,450	6.9	7,633	337	1,480
Trego	11,082	9.5	8,582	385	2,115
Wabaunsee	79,532	30.9	73,953	259	5,320
Wallace	1,742	12	590	152	1,000
Washington	87,524	19.5	79,095	2,389	6,040
Wichita	1,789	2.9	969	120	700
Wilson	53,510	13.7	45,422	1,358	6,730
Woodson	48,225	29.7	43,474	641	4,110
Wyandotte	204,786	40.2	198,030	3,741	3,015
Total	5,534,968	.....	4,847,055	159,902	528,011
	[1] 9,080				
Grand total	5,544,048				

[1] Educational and advisory work carried on by State agricultural college.

MICHIGAN.

TABLE 38.—*Revenue applied to roads and bridges, 1914.*

County.	Receipts from general county and township tax.	County.	Receipts from general county and township tax.
Alcona	$21,156.53	Lenawee	$117,367.84
Alger	41,253.15	Livingston	67,605.70
Allegan	145,873.10	Luce	20,633.08
Alpena	74,770.62	Mackinac	28,371.67
Antrim	43,556.14	Macomb	126,874.70
Arenac	28,385.78	Manistee	62,629.66
Baraga	51,595.62	Marquette	177,409.84
Barry	59,891.71	Mason	59,707.66
Bay	211,354.62	Mecosta	59,189.61
Benzie	28,759.66	Menominee	88,395.05
Berrien	188,769.30	Midland	40,130.95
Branch	62,751.58	Missaukee	39,033.12
Calhoun	65,086.38	Monroe	101,411.34
Cass	72,348.18	Montcalm	79,803.54
Charlevoix	58,294.88	Montmorency	16,289.86
Cheboygan	63,308.25	Muskegon	97,597.77
Chippewa	70,733.72	Newaygo	65,174.14
Clare	35,555.76	Oakland	242,797.18
Clinton	96,026.84	Oceana	50,552.06
Crawford	17,963.24	Ogemaw	23,893.42
Delta	58,329.52	Ontonagon	122,534.06
Dickinson	58,107.81	Osceola	49,625.42
Eaton	99,884.62	Oscoda	7,577.00
Emmet	56,641.32	Otsego	18,933.54
Genesee	233,447.49	Ottawa	125,584.37
Gladwin	39,525.30	Presque Isle	25,259.71
Gogebic	199,460.60	Roscommon	12,776.48
Grand Traverse	57,567.57	Saginaw	249,934.09
Gratiot	92,716.40	Sanilac	109,414.72
Hillsdale	102,780.59	Schoolcraft	28,112.11
Houghton	158,945.17	Shiawassee	123,750.62
Huron	117,431.91	St. Clair	157,613.73
Ingham	146,742.42	St. Joseph	66,812.01
Ionia	75,261.30	Tuscola	128,362.27
Iosco	34,439.64	Van Buren	81,809.05
Isabella	66,526.79	Washtenaw	75,203.26
Iron	135,902.12	Wayne	169,627.51
Jackson	201,133.66	Wexford	49,580.09
Kalamazoo	117,254.80		
Kalkaska	34,075.66	Total	7,080,177.00
Keweenaw	37,875.61		[1] 657,264.00
Kent	236,150.97		[2] 1,524,557.00
Lake	20,028.73		
Lapeer	69,052.93	Grand total	9,261,998.00
Leelanau	26,080.78		

[1] State reward fund.

[2] Estimated expenditures from local bond funds.

MINNESOTA.

TABLE 39.—*Revenue applied to roads and bridges, 1914.*

County.	Total revenue applied to roads and bridges.	General county and township tax.		Other revenue applied to roads.			State tax for roads and bridges (1 mill).
		Rate, mills per $1.	Receipts.	State aid to counties.	Miscellaneous revenue.		
					Amount.	Source.	
Aitkin	$70,717.42	13.35	$54,217.42	$16,500			$5,316.05
Anoka	55,072.56	6.58	39,572.56	15,500			4,987.83
Becker	36,548.16	4.67	22,548.16	14,000			7,371.28
Beltrami	66,430.13	10.51	49,430.13	17,000			6,823.39
Benton	39,321.02	8.09	23,821.02	15,500			4,133.21
Big Stone	32,075.95	4.30	16,575.95	15,500			5,537.89
Blue Earth	58,213.40	2.09	39,213.40	19,000			15,678.14
Brown	55,724.59	5.48	41,724.59	14,000			9,980.20
Carlton	49,129.89	7.48	32,629.89	16,500			5,481.86
Carver	55,056.88	4.05	39,256.88	14,000	$1,800	City and town donations.	7,783.52
Cass	64,403.53	10.11	49,403.53	15,000			5,347.29
Chippewa	54,115.70	3.33	40,115.70	14,000			7,571.18
Chisago	39,116.59	5.15	24,616.59	14,500			4,976.96
Clay	49,692.87	4.95	35,692.87	14,000			9,769.92
Clearwater	29,230.45	7.28	15,230.45	14,000			2,155.33
Cook	39,871.70	10.28	24,371.70	15,500			2,052.32
Cottonwood	59,553.78	3.88	45,553.78	14,000			8,454.37
Crow Wing	50,499.55	4.85	35,999.55	14,500			7,604.09
Dakota	69,082.72	3.76	50,082.72	19,000			12,111.98
Dodge	37,629.56	5.72	23,629.56	14,000			7,001.36
Douglas	40,971.86	3.95	26,971.86	14,000			6,883.48
Faribault	62,272.42	3.54	46,772.42	15,500			12,826.78
Fillmore	74,959.41	4.68	58,959.41	16,000			12,842.16
Freeborn	84,304.91	4.92	68,804.91	15,500			11,898.92
Goodhue	107,455.11	5.21	89,955.11	17,500			15,048.36
Grant	31,417.37	4.57	17,417.37	14,000			5,352.10
Hennepin	76,277.91	2.15	41,277.91	35,000			236,476.64
Houston	50,872.56	6.34	35,872.56	15,000			6,125.59
Hubbard	42,605.32	8.74	28,605.32	14,000			3,500.70
Isanti	41,715.87	8.83	27,215.87	14,500			3,475.32
Itasca	232,014.12	6.63	152,797.47	28,000	51,216.65	Transfer of funds	25,714.50
Jackson	83,078.08	5.38	62,463.08	15,000	5,000.00 615.00	Town appropriation. Liquor licenses.	10,222.74
Kanabec	32,340.95	9.85	18,340.95	14,000			2,426.75
Kandiyohi	74,612.38	5.42	58,612.38	16,000			9,473.48
Kittson	49,953.88	6.21	35,953.88	14,000			5,983.22
Koochiching	69,018.36	10.79	50,018.36	19,000			6,924.03
Lac qui Parle	78,751.60	2.98	53,720.33	14,500	10,531.27	Township drag tax.	9,688.45
Lake	58,250.47	11.11	44,250.47	14,000			4,268.75
Le Sueur	48,089.56	3.54	32,089.56	16,000			8,280.06
Lincoln	52,665.99	5.23	38,665.99	14,000			6,174.40
Lyon	76,775.01	5.35	62,775.01	14,000			10,205.73
McLeod	71,352.44	3.86	57,352.44	14,000			9,368.26
Mahnomen	26,725.39	9.05	12,725.39	14,000			2,110.41
Marshall	55,342.82	7.06	40,342.82	15,000			8,097.96
Martin	75,756.71	5.89	60,756.71	15,000			11,453.49
Meeker	78,289.29	5.83	62,289.29	16,000			8,415.17
Mille Lacs	56,791.83	9.05	28,791.83	28,000			3,336.12
Morrison	56,063.88	5.72	41,563.88	14,500			7,552.45
Mower	79,188.55	4.37	64,188.55	15,000			12,622.87
Murray	49,284.75	3.97	35,284.75	14,000			9,154.15
Nicollet	58,240.84	4.09	19,217.84	16,000	23,023.00	City, village, and township levy.	7,033.26
Nobles	42,750.85	3.32	28,750.85	14,000			11,324.61
Norman	40,785.93	5.41	26,785.93	14,000			6,737.56
Olmsted	75,639.96	5.15	57,939.96	16,000	1,700.00	Liquor licenses	11,476.69
Otter Tail	97,298.36	5.99	79,798.36	17,500			14,047.00
Pennington	27,293.69	5.73	13,293.69	14,000			3,441.29
Pine	65,647.91	10.42	50,522.91	14,500	625.00	Liquor licenses	5,705.30
Pipestone	32,208.51	3.17	18,208.51	14,000			6,633.95
Polk	80,354.76	6.70	63,354.76	17,000			14,496.90
Pope	31,452.57	4.88	17,452.57	14,000			6,200.46
Ramsey	156,072.34	.88	121,072.34	35,000			142,934.29
Red Lake	29,038.39	7.43	15,038.39	14,000			2,371.59
Redwood	47,748.88	3.53	33,248.88	14,500			11,737.08
Renville	68,912.29	4.48	52,912.29	16,000			13,232.10
Rice	74,076.41	3.69	58,576.41	15,500			11,330.43

MINNESOTA—Continued.

TABLE 39.—*Revenue applied to roads and bridges*—Continued.

County.	Total revenue applied to roads and bridges.	General county and township tax.		Other revenue applied to roads.			State tax for roads and bridges (1 mill).
		Rate, mills per $1.	Receipts.	State aid to counties.	Miscellaneous revenue.		
					Amount.	Source.	
Rock	$53,735.85	4.65	$39,735.85	$14,000	.....	.....	$8,581.52
Roseau	42,020.80	9.63	28,020.80	14,000	.....	.....	4,281.98
St. Louis	923,177.63	2.91	888,177.63	35,000	.....	.....	314,817.26
Scott	33,977.96	5.15	15,877.96	16,000	$2,100.00	City and town donations.	6,211.27
Sherburne	37,266.47	6.18	20,766.47	16,500	.....	.....	3,083.47
Sibley	66,789.23	4.44	52,789.23	14,000	.....	.....	8,780.60
Stearns	74,017.43	5.55	53,017.43	21,000	.....	.....	18,144.91
Steele	41,983.31	3.67	26,483.31	15,500	.....	.....	7,821.56
Stevens	45,032.45	5.45	29,532.45	15,500	.....	.....	5,651.60
Swift	45,667.89	4.13	30,167.89	15,500	.....	.....	7,707.94
Todd	58,169.12	5.13	44,169.12	14,000	.....	.....	7,373.50
Traverse	33,294.19	3.75	19,294.19	14,000	.....	.....	5,947.30
Wabasha	41,405.31	4.22	25,905.31	15,500	.....	.....	8,292.84
Wadena	30,994.65	6.44	16,994.65	14,000	.....	.....	2,799.74
Waseca	43,458.43	5.03	29,458.43	14,000	.....	.....	6,883.49
Washington	47,273.46	4.23	30,773.46	16,500	.....	.....	10,363.85
Watonwan	42,052.53	4.03	28,052.53	14,000	.....	.....	6,886.05
Wilkin	29,323.41	6.63	14,833.41	14,000	490.00	Liquor licenses	6,575.30
Winona	79,181.23	2.97	49,181.23	30,000	.....	.....	15,052.78
Wright	95,133.76	5.72	79,133.76	16,000	.....	.....	10,487.68
Yellow Medicine	65,193.02	3.96	51,193.02	14,000	.....	.....	9,481.59
Total	5,885,355.07 [1] 143,785.00 [2] 429,800.00	.....	4,388,254.15	1,400,000	97,100.92		1,369,969.95
Grand total	6,458,940.07						

[1] Maintenance State highway department, 1914.

[2] Local bond expenditure.

TABLE 40.—*Revenue applied to roads and bridges, 1914.*

County.	Total revenue applied to roads and bridges.	General county fund, roads and bridges.		Other revenue applied to roads and bridges.						Statute labor tax.			
		Rate, cents per $100.	Amount.	From dramshops.	From option stamps.	From auto revenue.	From general State fund.	From special funds.		Number of men who worked.	Number of days labor.	Daily wage.	Cash value of statute labor.
								Amount.	Source.				
Adair	$60,110.70	40	$32,271.47	.....	$183.01	$956.22	$1,200.00	$18,000.00	Special tax	2,500	2	$1.50	$7,500.00
Andrew	105,740.77	50	63,942.64	.....	125.00	540.00	1,839.13	36,294.00	....do	1,500	1	2.00	3,000.00
Atchison	62,690.79	25	44,347.53	.....	110.55	736.56	2,096.15	5,400.00	Poll tax	.....	.....	.....	.....
								10,000.00	General fund	.....	.....	.....	.....
Audrain	47,626.87	35	43,292.78	$800.00	172.15	1,185.64	2,176.30	.....	.....	.....	.....	.....	.....
Barry	33,256.49	25	27,467.87	3,000.00	224.35	810.00	1,754.27	.....	.....	.....	.....	.....	.....
Barton	24,771.49	25	2,719.44	.....	150.45	618.72	2,282.88	1,000.00	Donations	.....	.....	.....	.....
								6,000.00	Poll tax	2,000	2	3.00	12,000.00
Bates	58,379.61	.....	13,752.87	2,400.00	203.74	757.50	3,015.50	30,000.00	Special tax	2,500	2	1.25	6,250.00
								2,000.00	Donations	.....	.....	.....	.....
Benton	45,345.66	35	27,641.56	1,100.00	129.24	841.86	878.70	1,503.36	Revenue and interest	.....	.....	.....	.....
								1,322.32	Special tax	.....	.....	.....	.....
								3,798.62	Donations	2,710	2	1.50	8,130.00
Bollinger	14,264.87	35	12,976.50	.....	136.37	750.00	402.00	.....	.....	.....	.....	.....	.....
Boone	69,003.20	35	46,715.08	.....	230.15	551.22	2,241.00	1,200.00	Insurance from county	.....	.....	.....	.....
								9,034.00	Poll tax	2,007	3	1.50	9,031.50
Buchanan	245,004.36	18	178,577.37	60,000.00	676.35	500.64	5,250.00	.....	.....	.....	.....	.....	.....
Butler	72,225.85	25	37,927.17	10,916.66	209.18	795.00	1,127.84	10,000.00	Poll tax	2,500	3	1.50	11,250.00
Caldwell	30,816.36	.....	11,833.06	.....	114.35	645.00	1,723.95	10,000.00	....do	.....	.....	.....	.....
								6,500.00	Special tax	.....	.....	.....	.....
Callaway	122,906.98	35	45,854.01	1,600.00	178.33	577.50	1,630.64	966.50	Poll tax	.....	.....	.....	.....
								16,100.00	Special tax	16,000	2	1.75	56,000.00
Camden	17,952.98	25	16,298.08	.....	107.55	960.00	587.35	.....	.....	.....	.....	.....	.....
Cape Girardeau	44,179.50	35	22,025.00	10,166.66	253.00	858.72	1,631.42	468.20	Miscellaneous	.....	.....	.....	.....
								336.50	Donations	1,688	4	1.25	8,440.00
Carroll	10,938.44	.....	7,595.01	.....	181.78	957.78	2,203.87	.....	.....	.....	.....	.....	.....
Carter	2,636.44	25	1,441.65	.....	51.35	772.50	370.94	.....	.....	.....	.....	.....	.....
Cass	41,539.95	25	21,500.00	.....	177.45	840.00	3,022.50	.....	.....	4,000	2	2.00	16,000.00
Cedar	36,610.13	25	31,394.55	.....	132.05	622.50	811.03	2,900.00	Special tax	125	4	1.50	750.00
Chariton	16,788.35	37	13,536.36	.....	202.45	967.50	2,082.04	.....	.....	.....	.....	.....	.....
Christian	19,706.64	25	17,836.48	.....	146.83	776.22	947.11	.....	.....	.....	.....	.....	.....
Clark	42,888.09	35	40,842.91	.....	89.31	825.00	1,130.87	.....	.....	.....	.....	.....	.....
Clay	42,531.37	40	36,960.31	2,666.66	152.48	510.00	2,241.92	.....	.....	.....	.....	.....	.....
Clinton	32,460.32	35	30,000.00	.....	119.22	641.22	1,699.88	.....	.....	.....	.....	.....	.....

Cole	55,367.37	25	39,117.87	9,166.66	166.15	353.22	1,109.47			1,212	3	1.50	5,454.00
Cooper	88,266.81	40	80,034.63	5,366.66	157.35	750.00	1,958.17						
Crawford	16,202.35	30	6,751.62		122.95	1,032.50	718.53	487.80	Poll tax				
								1,813.75	Donations	1,099	4	1.20	5,275.20
Dade	30,318.76	5	10,510.59		136.76	708.84	882.57	7,500.00	do				
								500.00	Poll tax	2,400	3½	1.20	10,080.00
Dallas	17,153.25	25	3,455.40		128.56	806.22	812.27	4,122.00	Special	1,631	4	1.20	7,828.80
Daviess	37,832.48	25	14,981.29		144.50	825.00	1,881.69	13,000.00	Part of general funds	2,000	2	1.75	7,000.00
Dekalb	40,706.14	45	22,457.01		98.95	600.00	1,550.18	8,000.00	Poll tax	2,000	2	2.00	8,000.00
Dent	15,095.13	20	12,409.13		131.00	1,755.00	800.00						
Douglas	9,132.56	25	6,533.74		169.67	1,125.00	693.09	611.06	Interest on county deposits				
Dunklin	21,676.49	35	19,211.65		305.46	851.22	1,308.16						
Franklin	224,749.35	35	68,873.86	10,666.66	261.41	1,417.50	1,945.40	42,260.52	Donations, etc	16,554	3	2.00	99,324.00
Gasconade	36,994.55	35	29,703.22	5,333.32	122.77	892.50	942.74						
Gentry	36,245.06	38	9,507.76		136.65	772.50	1,138.63	24,689.52	Special tax in townships				
								26,800.00	Special tax				
Greene	146,950.00	20	16,046.13	15,020.00	485.00	900.00	4,612.28	20,000.00	Poll tax				
								63,086.59	Miscellaneous revenue				
Grundy	11,861.94	23	7,914.12	2,133.32	131.05	750.00	933.45						
Harrison	30,000.00	25	13,287.37		178.10	958.38	1,856.17	13,719.98	Township tax				
Henry	44,269.86	25	17,852.22	1,200.00	214.51	970.20	1,832.93	1,200.00	Special bridge levy				
								15,000.00	Left from railroad bonds	1,000	4	1.50	6,000.00
Hickory	13,500.79	25	9,239.64		379.80	487.50	528.85			1,146	2	1.25	2,865.00
Holt	53,079.06	35	44,263.72		123.85	697.44	1,694.05	6,300.00	Road district tax				
Howard	49,959.44	35	46,892.66		119.28	622.50	1,125.00			400	1½	2.00	1,200.00
Howell	30,467.32	20	11,796.43		208.42	945.00	983.67	960.00	Railroad tax				
								200.00	Poll tax	1,971	4	1.95	15,373.80
Iron	6,853.39	25	3,544.08	400.00	87.11	796.20	1,000.00	741.00	Back taxes				
								285.00	Donations				
Jackson	224,812.22	21	58,549.31	153,333.32	2,452.02	1,169.37	5,250.00	4,058.20	Poll tax				
Jasper	167,692.37	25	132,886.92	28,266.66	735.54	705.00	5,098.25						
Jefferson	82,828.40	35	58,218.01	14,000.00	255.80	240.00	1,654.59	3,750.00	Poll tax	1,256	2½	1.50	4,710.00
Johnson	33,449.92	25	30,000.00		204.79	753.72	2,491.41						
Knox	30,654.06	30	26,227.57		97.07	701.22	1,128.20			500	1	3.00	1,500.00
Laclede	22,333.13	25	11,288.78		163.55	798.00	482.80			2,000	4	1.20	9,600.00
Lafayette	70,484.78	20	45,860.53	9,000.00	258.57	802.50	2,563.18	12,000.00	Special road district				
Lawrence	29,636.63	25	27,116.89		225.40	900.00	1,394.34						
Lewis	32,011.71	35	15,425.68		119.11	877.50	1,218.04	6,371.38	Special road district				
								8,000.00	Donations				
Lincoln	57,281.33	35	49,007.35	400.00	134.42	795.00	1,319.56			1,250	3	1.50	5,625.00
Linn	25,752.70	25	21,512.93	1,200.00	201.25	936.06	1,902.46						
Livingston	17,110.66	25	13,161.78		171.89	900.00	2,876.99						
McDonald	25,906.97	25	20,426.40		139.16	708.72	550.00	1,148.19	Railroad and telegraph				
								2,934.50	Good roads clubs				
Macon	28,244.37	25	25,000.00		235.65	1,008.72	2,000.00						
Madison	13,782.87	20	5,356.66		102.43	450.00	2,100.28			1,283	3	1.50	5,773.50
Maries	16,679.28	30	9,282.04		93.35	592.50	505.31	2,126.08	Special road district	850	2	2.40	4,080.00
Marion	82,896.60	35	64,311.30	15,333.32	261.47	750.00	2,240.51						
Mercer	21,176.04	10	5,436.66		109.51	697.50	1,350.00	13,582.37	Township tax				
Miller	22,439.45	35	11,180.78		153.74	767.22	737.71			2,000	4	1.20	9,600.00
Mississippi	47,424.60	35	24,027.89		114.78	1,324.62	957.31			7,000	2	1.50	21,000.00
Moniteau	42,625.02	35	18,369.73	833.32	120.75	581.22	1,000.00	15,000.00	Special road district	1,400	4	1.20	6,720.00

TABLE 40.—*Revenue applied to roads and bridges, 1914*—Cohtinued.

County.	Total revenue applied to roads and bridges.	General county fund, roads and bridges.		Other revenue applied to roads and bridges.						Statute labor tax.			
		Rate, cents per $100.	Amount.	From dram-shops.	From option stamps.	From auto revenue.	From general State fund.	From special funds. Amount.	From special funds. Source.	Number of men who worked.	Number of days labor.	Daily wage.	Cash value of statute labor.
Monroe	$65,009.14	40	$51,058.81		$136.09	$882.77	$1,681.47			2,500	3	$1.50	$11,250.00
Montgomery	66,879.97	25	59,634.82		117.70	757.56	1,203.89			1,722	2	1.50	5,166.00
Morgan	24,283.93	35	10,590.00	$333.32	110.24	592.50	756.87	$5,000.00 4,635.00	Donations Poll tax	1,133	1⅓	1.50	2,266.00
New Madrid	29,388.14	10	26,848.71		189.95		2,349.48						
Newton	49,119.53	25	35,558.68		254.26	750.00	1,500.99			3,071	3	1.20	11,055.60
Nodaway	59,030.14	25	52,940.98	1,066.66	232.98	1,710.00	3,079.52						
Oregon	27,665.53	35	11,390.95		141.42	831.00	670.91	7,600.00	Poll tax	1,500	3¾	1.25	7,031.25
Osage	51,885.00	40	33,253.60	6,000.00	135.33	727.50	968.57			1,800	4	1.50	10,800.00
Ozark	3,662.51	10	1,757.39		640.50	772.50	492.12						
Pemiscot	30,208.64	15	13,290.00	6,933.32	167.30	561.36	1,406.15	7,850.51	Township tax				
Perry	22,277.05	25	10,535.18	6,833.32	150.55	802.50	406.50			1,183	2	1.50	3,549.00
Pettis	116,584.31	45	98,643.02	11,600.00	263.28	1,733.75	2,694.26			550	2	1.50	1,650.00
Phelps	20,994.73	35	19,131.67		145.63	751.86	965.57						
Pike	54,965.39	30	38,319.00	4,266.66	179.35	765.00	1,952.38	3,120.00	From petitioners	2,121	2	1.50	6,363.00
Platte	35,912.71	30	27,000.00	4,000.00	118.23	641.22	1,553.26	2,600.00	Poll tax				
Polk	44,973.66	35	26,820.41		188.25	765.00	1,600.00			2,600	5	1.20	15,600.00
Pulaski	11,652.00	25	2,445.19		111.47	1,338.75	556.59			1,200	5	1.50	7,200.00
Putnam	45,560.29	25	12,946.45		118.61	810.00	1,175.23	20,000.00 2,880.00 1,870.00	Donations Poll tax Special road district	1,600	3	1.20	5,760.00
Ralls	30,422.69	45	12,948.11	1,333.32	98.27	633.72	1,159.58	7,633.28 3,896.00 2,720.41	Railroad bonds Poll tax County revenues, etc.				
Randolph	46,465.03	35	43,452.01		220.98	787.50	2,004.54						
Ray	41,259.06	25	38,715.16		181.40	802.50	1,560.00						
Reynolds	11,386.76	10	8,955.00		95.25	1,460.62	475.89	400.00	Interest on daily balances				
Ripley	18,180.77	25	9,520.00		128.21	562.50	675.06	500.00	Donations	1,700	4	1.00	6,800.00
St. Charles	78,195.32	15	41,363.25	16,000.00	208.13	847.50	2,578.34	7,198.10	County revenue				
St. Clair	12,877.83	35	10,400.22		134.15	1,995.23	348.23						
Ste. Genevieve	31,040.09	35	21,060.01	6,666.66	108.10	405.00	630.05	262.53 1,907.74	Interest on earnings Railroad and telegraph tax				
St. Francois	74,834.75	35	52,405.48	11,466.66	280.90	645.00	2,106.71	7,930.00	Road district tax				
St. Louis	443,910.15	25	377,712.89	59,500.00	702.30	983.97	5,011.89						

Saline	87,490.14	25	65,182.73		232.80	675.00	2,751.61	18,648.00	From county revenue					
Schuyler	30,068.14	35	15,676.54		75.90	671.27	677.17	6,768.00 2,679.00 3,520.26	Poll tax Donations Road district					
Scotland	31,249.89	45	29,499.46		91.71	678.72	980.00							
Scott	62,086.81	25	46,232.13	13,780.00	192.70	469.86	1,412.12							
Shannon	20,802.11	25	13,067.00		119.20	1,035.00	673.91			1,969	2	1.50	5,907.00	
Shelby	22,225.96	25	19,693.48		118.79	720.72	1,692.97							
Stoddard	49,805.13	25	34,824.18		263.72	1,136.22	1,581.01			2,000	4	1.50	12,000.00	
Stone	7,975.72	75	3,100.28		118.41	1,383.75	873.28	2,500.00	Donations					
Sullivan	10,791.61	25	7,507.95		165.25	677.22	921.19	1,520.00	....do					
Taney	18,736.65	25	10,056.95		99.00	802.50	578.20			1,200	4	1.50	7,200.00	
Texas	10,422.92	20	7,960.49		217.68	1,432.50	812.25							
Vernon	14,558.96	25	11,039.69		239.42	1,074.36	2,205.49							
Warren	13,851.43	35	8,045.02	4,333.32	78.77	581.22	813.10							
Washington	6,027.32	10	4,343.02		124.30	660.00	900.00							
Wayne	33,680.69	35	24,579.29		142.06	1,110.00	749.34			1,820	4	1.25	7,100.00	
Webster	33,248.26	25	21,651.08		172.36	791.22	883.60	1,000.00 8,750.00	Donations Poll tax					
Worth	17,281.87	25	15,954.58		71.37	442.50	813.42							
Wright	19,267.56	25	14,327.48		184.68	652.72	742.68			700	4	1.20	3,360.00	
Total	5,450,482.71		3,508,219.39	518,416.46	23,083.19	93,783.58	175,101.17	626,460.27						505,418.65
	[1] 55,000.00													
	[2] 7,566.00													
Grand total	5,513,048.71													

[1] Expended from bond-issue funds.

[2] Administration of State highway department.

MONTANA.

TABLE 41.—*Revenue for roads and bridges, 1914.*

County.	Total revenue applied to roads and bridges.	General county road and bridge tax.		Other revenue applied to roads and bridges.	
		Rate, mills per $1.	Amount.	Amount.	Source.
Beaverhead	$51,188.62	5	$39,744.10	$11,444.52	Balance from 1913.
Big Horn	22,778.80	2.5	12,040.46	9,724.29	Do.
				1,014.05	From State highway fund.
Blaine	28,034.61	1	9,602.25	18,432.36	Balance from 1913.
Broadwater	31,359.33	3.5	13,330.00	18,029.33	Do.
Carbon	87,830.05	5	51,350.21	36,497.84	Do.
Cascade	113,573.59	3	58,845.18	54,728.41	Do.
Chouteau	60,447.91	4	35,061.75	25,386.16	Do.
Custer	224,811.45	4.5	162,140.78	62,670.67	Do.
Dawson	72,926.35	5	54,877.30	18,049.05	Do.
Deerlodge	36,542.03	3	18,982.45	17,559.58	Do.
Fallon	29,105.83	5	29,105.83		
Fergus	179,744.32	5	99,388.53	79,971.79	Do.
				384.00	Lewiston special fund.
Flathead	109,942.59	5	56,805.57	53,137.02	Balance from 1913.
Gallatin	65,875.46	5	59,651.88	6,223.58	Do.
Granite	27,308.82	4	13,865.97	13,442.85	Do.
Hill	82,223.90	5	46,390.75	35,833.15	Do.
Jefferson	35,362.53	2.5	24,430.77	10,931.75	Do.
Lewis and Clark	44,060.37	3	32,849.83	11,210.54	Do.
Lincoln	128,329.29	5	99,678.30	28,650.99	Do.
Madison	66,626.47	4	30,041.59	7,178.11	District road fund.
				29,406.77	Balance from 1913.
Meagher	59,708.46	3.5	32,509.56	27,198.90	Do.
Mineral	9,524.15	2.5	9,524.15		
Missoula	81,970.71	2.5	77,319.34	4,651.37	Do.
Musselshell	56,802.39	2	25,733.52	31,068.87	Do.
Park	61,206.64	5	60,633.46	573.18	Do.
Phillips [1]					
Powell	65,999.38	5	39,678.92	26,320.46	Do.
Prairie	16,009.00	3	16,009.00		
Ravalli	45,798.40	3	23,605.62	22,192.78	Do.
Richland	19,843.12	5	19,843.12		
Rosebud	109,968.55	5	64,328.23	45,640.32	Do.
Sanders	82,617.75	3	66,036.11	16,581.64	Do.
Sheridan	83,678.71	3	63,482.20	20,196.51	Do.
Silverbow	81,566.37	2	59,809.10	21,757.27	Do.
Stillwater	65,766.24	5	47,115.04	18,651.20	Do.
Sweet Grass	31,657.59	3.5	16,313.99	15,343.60	Do.
Teton	197,297.27	3	70,400.11	31,080.81	Do.
				95,816.35	Road and bridge fund and awards.
Toole	10,750.21	3	8,882.21	1,868.00	Special road fund.
Valley	78,023.42	3	42,740.00	35,283.42	Balance from 1913.
Wibaux	11,624.55	5	11,624.55		
Yellowstone	104,524.67	5	61,186.15	43,338.52	Do.
Total	2,772,409.90		1,764,957.88	1,007,452.02	
	[2] 13,515.71				
	[3] 102,475.00				
Grand total	2,888,400.61				

[1] No report.
[2] Expenditure by State highway commission from motor-vehicle fund.
[3] Expenditure from county bond issues.

TABLE 42.—*Revenue applied to roads and bridges, 1914.*

County.	Total revenue applied to roads and bridges.	General county and township tax.		Other revenue applied to roads and bridges.				
		Rate, mills per $1.	Amount.	Poll tax.	Automobile fund ($2 per car).	State aid bridge fund.	Amount.	Miscellaneous sources.
Adams	$22,600.87	.....	$20,000.00	.....	$1,064	$1,536.87	.....	
Antelope	31,856.46	.....	30,198.75	.....	586	1,071.71	.....	
Arthur	1,498.95	3	697.19	$755.00	.....	46.76	.....	
Banner	1,364.52	1	485.00	755.00	28	96.52	.....	
Blaine	2,302.89	2.5	1,650.00	500.00	32	120.89	.....	
Boone	30,141.82	.....	22,587.54	.....	566	1,130.28	$5,858.00	Road drag fund.
Box Butte	4,953.12	2	4,339.23	.....	200	413.89	.....	
Boyd	9,245.13	3	8,449.80	.....	232	563.33	.....	
Brown	7,749.08	3	5,000.00	2,200.00	174	375.08	.....	
Buffalo	3,335.86	.....	.....	88.50	774	1,510.36	963.00	Inheritance tax.
Burt	25,030.82	.....	18,984.38	3,910.00	766	1,370.44	5,000.00	Do.
Butler	58,010.90	.....	46,282.00	4,232.00	890	1,606.90	.....	
Cass	27,553.03	3	[1] 25,000.00	.....	876	1,677.03	.....	
Cedar	18,719.57	1.1	9,000.00	6,250.00	818	1,651.57	1,000.00	Do.
Chase	3,549.09	3	3,176.43	.....	162	210.66	.....	
Cherry	21,781.67	3	14,765.00	6,083.50	174	759.17	.....	
Cheyenne	11,070.90	3	8,276.30	2,012.50	222	560.10	.....	
Clay	52,007.31	10	43,186.00	6,122.00	1,116	1,583.31	.....	
Colfax	19,273.88	.....	17,500.00	.....	606	1,167.88	.....	
Cuming	30,785.36	5.1	22,698.47	4,296.23	616	1,585.66	1,589.00	Do.
Custer	74,549.50	8.6	61,604.97	10,207.91	782	1,484.22	470.40	Do.
Dakota	10,505.49	3	9,577.50	.....	292	635.99	.....	
Dawes	14,432.28	6	13,864.14	.....	106	462.14	.....	
Dawson	25,985.47	4	24,000.00	.....	670	1,315.47	.....	
Deuel	2,319.42	.....	2,000.00	.....	70	249.42	.....	
Dixon	43,233.05	9	41,785.00	.....	518	930.05	.....	
Dodge	14,070.61	6.6	5,784.46	.....	1,366	1,920.15	5,000.00	Do.
Douglas	48,309.43	.....	23,453.69	.....	3,294	9,353.82	12,207.92	Do.
Dundy	3,432.44	2	3,000.00	.....	126	306.44	.....	
Fillmore	9,897.36	3.2	7,634.00	.....	790	1,473.36	.....	
Franklin	5,078.40	1	3,817.00	.....	498	763.40	.....	
Frontier	9,294.96	4	5,416.64	3,183.00	154	541.32	.....	
Furnas	12,908.57	2	11,354.42	400.50	356	797.65	.....	
Gage	109,272.31	10	104,398.82	.....	1,082	2,291.49	1,500.00	Do.
Garden	3,294.93	4	3,000.00	.....	64	230.93	.....	

TABLE 42.—*Revenue applied to roads and bridges, 1914*—Continued.

County.	Total revenue applied to roads and bridges.	General county and township tax.		Other revenue applied to roads and bridges.				
		Rate, mills per $1.	Amount	Poll tax.	Automobile fund ($2 per car).	State aid bridge fund.	Amount.	Miscellaneous sources.
Garfield	$3,532.53	.....	[1] $3,282.70	.....	$98	$151.83	.....	
Gosper	12,331.48	5	9,868.33	$1,921.00	158	384.15	.....	
Grant	3,280.14	.....	2,389.77	717.05	14	159.32	.....	
Greeley	16,224.86	9.5	15,300.00	.....	236	688.86	.....	
Hall	6,797.94	.5	3,921.40	.....	1,040	1,563.54	$273.00	Do.
Hamilton	15,757.65	.....	13,000.00	.....	1,196	1,561.65	.....	
Harlan	42,973.23	7.4	24,266.00	.....	380	646.23	17,681.00	Special township levy.
Hayes	4,625.70	6	4,400.00	.....	82	143.70	.....	
Hitchcock	3,442.65	2	3,000.00	.....	102	340.65	.....	
Holt	6,445.27	.5	2,500.00	.....	442	1,003.27	2,500.00	Dragging fund.
Hooker	1,930.09	.....	1,800.00	.....	10	120.09	.....	
Howard	15,776.51	5	13,348.12	.....	446	896.26	1,086.13	Road tax.
Jefferson	46,504.40	4	27,542.28	7,645.00	554	1,377.16	2,500.00 6,885.96	Inheritance and auto tax. Drag fund.
Johnson	15,425.87	3.4	14,000.00	.....	490	935.87	.....	
Kearney	4,414.29	.....	3,047.50	.....	526	840.79	.....	
Keith	12,699.91	5	10,992.00	1,065.00	138	471.91	33.00	Inheritance tax.
Keyapaha	7,530.70	6	5,575.00	1,656.00	100	199.70	.....	
Kimball	3,349.59	.....	2,405.13	.....	20	306.59	617.87	Special bridge tax.
Knox	49,336.95	8	48,000.00	.....	172	1,164.95	.....	
Lancaster	31,316.18	1	24,245.00	.....	2,222	4,849.18	.....	
Lincoln	21,573.62	.....	20,000.00	.....	476	1,097.62	.....	
Logan	3,571.72	.....	3,379.65	.....	80	112.07	.....	
Loup	1,897.18	2	867.77	910.00	30	89.41	.....	
Madison	33,219.20	.....	30,200.65	.....	756	1,387.55	875.00	Inheritance tax.
McPherson	551.30	.....	.....	435.08	42	74.22	.....	
Merrick	27,956.48	6	25,673.66	.....	616	1,044.92	621.90	Do.
Morrill	6,380.72	3.5	6,000.00	.....	40	340.72	.....	
Nemaha	22,460.73	1	21,087.19	.....	424	828.05	121.49	Do.
Nance	10,178.93	.....	8,280.00	.....	772	1,126.93	.....	
Nuckolls	18,870.14	2	12,029.49	4,439.50	676	1,169.46	555.69	Special district levy.
Otoe	38,735.25	4	36,000.00	.....	998	1,737.25	.....	
Pawnee	50,262.97	9	48,757.00	.....	426	1,079.97	.....	
Perkins	1,355.43	.75	941.01	.....	134	280.42	.....	
Phelps	24,655.68	5.5	23,348.00	.....	440	867.68	.....	
Pierce	37,867.89	7	28,761.70	4,145.00	382	929.19	3,150.00	Special township tax.

Platte	48,408.67	.....	35,459.73	7,269.00	1,046	1,833.94	2,800.00	Inheritance tax.
Polk	12,029.42	.....	9,937.13	.....	942	1,150.29	.....	
Redwillow	10,132.19	3	9,275.80	.....	238	618.39	.....	
Richardson	31,347.86	5	26,470.07	.....	846	1,485.52	2,546.27	Do.
Rock	4,816.38	.....	4,484.80	.....	84	247.58	.....	
Saline	22,406.17	.....	20,000.00	.....	790	1,616.17	.....	
Sarpy	36,657.06	.....	18,617.88	.....	270	850.76	16,918.42	Appropriation for bridges and culverts.
Saunders	29,415.01	.....	6,175.00	.....	1,086	2,154.01	20,000.00	Special county road levy.
Scotts Bluff	9,527.25	.....	8,665.55	.....	284	577.70	.....	
Seward	6,103.59	.4	3,370.39	.....	1,048	1,685.20	.....	
Sheridan	14,331.92	3.5	13,506.00	.....	240	585.92	.....	
Sherman	31,788.16	10.25	30,900.00	.....	234	654.16	.....	
Sioux	8,858.79	2.8	8,254.50	.....	68	317.00	219.29	Bridge fund.
Stanton	15,187.60	.....	14,000.00	.....	296	891.60	.....	
Thayer	16,936.29	.....	15,121.66	.....	596	1,218.63	.....	
Thomas	3,142.75	.....	3,000.00	.....	24	118.75	.....	
Thurston	21,648.67	7	20,749.08	.....	282	617.59	.....	
Valley	37,051.80	.....	36,000.00	.....	330	721.80	.....	
Washington	19,851.82	3	17,716.96	.....	954	1,180.86	.....	
Wayne	18,007.14	2	11,412.20	3,170.00	532	1,140.84	1,751.10	Special road levy.
Webster	17,447.19	.....	15,714.63	.....	686	1,046.56	.....	
Wheeler	4,287.38	4	3,016.53	1,031.00	94	145.85	.....	
York	4,745.95	.....	1,655.66	.....	1,328	1,762.29	.....	
Total	1,796,277.69	.....	1,454,680.65	85,399.77	47,086	94,386.83	114,724.44	

[1] Includes poll tax.

NEVADA.

TABLE 43.—*Revenue applied to roads and bridges, 1915.*

County.	Total revenue applied to roads and bridges.	General county tax.		Poll tax.	County.	Total revenue applied to roads and bridges.	General county tax.		Poll tax.
		Rate, cents per $100.	Amount.				Rate, cents per $100.	Amount.	
Churchill	$3,875.00	.....	$3,075.00	$800	Mineral	$9,600.00	18	$7,200.00	$2,400
Clark	19,000.00	20	14,800.00	4,200	Nye	19,000.00	10	11,000.00	8,000
Douglas	2,750.00	38	1,250.00	1,500	Ormsby	5,000.00	29	4,500.00	500
Elko	75,000.00	21	72,600.00	2,400	Storey	1,000.00	.....	.....	1,000
Esmeralda	6,600.00	04	3,000.00	3,600	Washoe	30,000.00	.....	21,000.00	9,000
Eureka	4,800.00	07	3,600.00	1,200	White Pine	14,900.00	35	4,900.00	10,000
Humboldt	4,500.00	.....	.....	4,500					
Lander	8,231.86	{ 10 / 40 }	7,805.86	426	Total	227,756.86	.....	173,730.86	54,026
						[1] 17,256.79			
Lincoln	2,500.00	.....	.....	2,500					
Lyon	21,000.00	27	19,000.00	2,000	Grand total.	245,013.65			

[1] Expended from county bond issue.

NEW MEXICO.

TABLE 44.—*Revenue applied to roads and bridges, 1914.*

County.	Total revenue applied to roads and bridges.	General State and county tax, roads and bridges.[1]		Other revenue applied to roads and bridges.			
		Combined rate, State and county, mills per $1.	Amount.	Forest reserve fund.[2]	Special bridge tax.	Personal tax ($3).	County levy for special roads.
Bernalillo	$28,859.07	4	$24,739.73	$111.35	$200.99	$3,807.00	.....
Chaves	25,166.63	4	24,862.18	71.10	233.35	.....	.....
Colfax	50,621.58	4	22,406.23	24.20	12,720.00	10,114.65	5,356.50
Curry	4,926.74	4	4,548.24	.....	.....	378.50	.....
Dona Ana	68,343.55	4	65,627.07	.....	440.00	.....	2,276.48
Eddy	12,291.88	4	6,824.64	22.35	4,648.76	796.13	.....
Grant	45,527.97	4	33,306.24	2,236.96	.....	9,984.77	.....
Guadalupe	8,520.12	4	8,520.12	.....	.....	.....	.....
Lincoln	13,724.20	4	12,161.18	564.27	.....	998.75	.....
Luna	15,832.13	4	14,288.68	.....	.....	1,543.45	.....
McKinley	27,204.48	4	19,187.03	1,307.45	.....	6,710.00	.....
Mora	17,618.39	4	15,020.72	277.67	.....	.....	2,320.00
Otero	15,973.31	4	12,610.12	866.04	.....	483.00	2,014.15
Quay	5,227.41	4	5,224.41	.....	.....	3.00	.....
Rio Arriba	10,826.97	4	6,801.42	2,731.21	.....	1,294.34	.....
Roosevelt	5,114.88	4	4,970.88	.....	.....	144.00	.....
Sandoval	4,361.99	4	3,981.89	380.10	.....	.....	.....
San Juan	7,500.97	4	4,511.92	.....	2,989.05	.....	.....
San Miguel	39,300.17	4	16,316.39	1,168.70	21,126.08	684.00	5.00
Santa Fe	12,255.76	4	8,018.38	431.69	3,452.69	133.00	220.00
Sierra	7,754.29	4	6,276.44	631.75	.....	846.10	.....
Socorro	27,934.26	4	9,988.31	3,994.54	8,085.94	3,761.90	2,103.57
Taos	6,069.75	4	4,967.71	1,102.04	.....	.....	.....
Torrance	5,493.52	4	5,140.53	343.99	.....	9.00	.....
Union	7,872.64	4	7,848.64	.....	.....	24.00	.....
Valencia	36,076.16	4	9,806.05	606.28	9,423.60	565.05	15,675.18
Total	510,398.82	.....	357,955.15	16,871.69	63,320.46	42,280.64	29,970.88
	[3] 16,000.00						
	[4] 30,000.00						
Grand total	556,398.82						

[1] State tax 1 mill, county 3 mills.
[2] The "forest reserve fund" is applied to roads and schools, but there is no way of dividing the amounts.
[3] Expended by State from automobile licenses.
[4] Expended from bond-issue funds in Dona Ana County.

TABLE 45.—*Revenue applied to roads and bridges, 1914.*

County.	Total revenue applied to roads and bridges.	General county and township tax.	Other revenues applied to roads and bridges.				Labor tax.			
			Auto license.	Poll tax.	Amount.	Miscellaneous source.	Number of men who worked.	Average number of days worked.	Average daily wage.	Cash value of labor tax.
Adams	$27,352.90	$20,585.00	$209.40	$960.00	$145.00	Emergency and donation fund	351	4½	$3.00	$4,738.50
					715.00	Special road and bridge fund				
Barnes	65,901.69	56,070.47	1,863.40	2,500.00	5,467.82	do				
Benson	74,719.00	57,368.00	958.00	1,700.00	35.00	Emergency and donation fund	310	14	3.00	13,020.00
					1,638.00	Special road and bridge fund				
Billings	18,174.37	12,273.36	187.60	1,500.00	4,213.41	do				
Bottineau	97,445.50	87,914.00	1,473.00	2,500.00	1,115.00	Emergency and donation fund	198	2½	4.50	2,227.50
					2,216.00	Special road and bridge fund				
Bowman	8,297.40	4,500.00	279.40	1,200.00	698.00	do	135	4	3.00	1,620.00
Burke	40,177.70	36,200.00	662.20	1,400.00	101.50	Emergency and donation fund	72	3½	3.00	756.00
					1,058.00	Special road and bridge fund				
Burleigh	63,458.20	46,000.00	858.20	1,600.00	15,000.00	do				
Cass	133,311.60	125,000.00	3,811.60	4,500.00						
Cavalier	85,244.74	79,063.00	1,285.40	2,000.00	75.00	Emergency and donation fund	152	3	2.75	1,254.00
					1,567.34	Special road and bridge fund				
Dickey	24,173.75	21,812.55	961.20	1,400.00						
Divide	38,760.00	36,700.00	460.00	1,600.00						
Dunn	21,378.20	17,150.00	188.20	1,300.00	2,740.00	Special road and bridge fund				
Eddy	37,899.20	35,690.00	383.20	700.00	350.00	Emergency and donation fund				
					776.00	Special road and bridge fund				
Emmons	42,835.40	24,873.00	489.40	1,500.00	15,973.00	do				
Foster	36,493.80	31,000.00	593.80	900.00	4,000.00	do				
Golden Valley	17,404.40	14,800.00	574.40	1,000.00	250.00	Emergency and donation fund				
					780.00	Special road and bridge fund				
Grand Forks	95,559.00	79,000.00	2,559.00	4,000.00	10,000.00	do				
Griggs	37,963.80	31,000.00	963.80	1,000.00	5,000.00	do				
Hettinger	39,476.80	29,000.00	276.80	1,200.00	9,000.00	do				
Kidder	34,068.80	17,500.00	368.80	1,200.00	15,000.00	do				
La Moure	44,453.75	39,854.75	1,314.00	1,700.00	1,585.00	do				
Logan	23,737.80	21,810.00	267.80	900.00	760.00	do				
McHenry	85,149.60	80,500.00	1,149.60	2,500.00			250	2	2.00	1,000.00
McIntosh	17,258.20	16,000.00	258.20	1,000.00						
McLean	35,458.14	29,272.34	685.80	2,400.00	3,100.00	Special road and bridge fund				
McKenzie	18,303.40	16,000.00	303.40	2,000.00						
Mercer	30,488.78	29,348.38	240.40	900.00						

TABLE 45.—*Revenue applied to roads and bridges, 1914*—Continued.

County.	Total revenue applied to roads and bridges.	General county and township tax.	Other revenues applied to roads and bridges.				Labor tax.			
			Auto license.	Poll tax.	Amount.	Miscellaneous source.	Number of men who worked.	Average number of days worked.	Average daily wage.	Cash value of labor tax.
Morton	93,569.60	45,000.00	1,069.60	3,500.00	44,000.00	Special road and bridge fund				
Mountrail	48,772.80	36,629.00	395.80	2,000.00	238.00	Emergency and donation fund	352	8	3.00	8,448.00
					1,062.00	Special road and bridge fund				
Nelson	38,107.78	35,428.78	1,079.00	1,600.00						
Oliver	19,516.65	18,288.65	99.00	700.00	429.00	Special road and bridge fund				
Pembina	48,207.60	43,000.00	1,207.60	2,000.00	2,000.00	do				
Pierce	39,438.90	34,848.00	515.40	1,200.00	635.00	Emergency and donation fund	94	7	1.75	1,151.50
					1,089.00	Special road and bridge fund				
Ramsey	55,171.40	44,000.00	1,171.40	2,000.00	8,000.00	do				
Ransom	25,251.40	23,000.00	851.40	1,400.00						
Renville	33,880.80	32,129.00	551.80	1,200.00						
Richland	81,105.91	72,797.00	2,136.60	867.31	200.00	Emergency and donation fund	193	3	4.00	2,316.00
					2,789.00	Special road and bridge fund				
Rolette	21,612.24	20,000.00	389.60	1,222.64						
Sargent	38,142.00	33,335.00	959.00	1,400.00	1,260.00	Special road and bridge fund	99	4	3.00	1,188.00
Sioux	2.40		2.40							
Sheridan	23,987.20	21,800.00	296.20	1,200.00	691.00	Special road and bridge fund				
Slope	2,699.25						305	5	1.77	2,699.25
Stark	54,975.08	40,398.59	793.80	1,700.00	12,082.69	Special road and bridge fund				
Steele	20,112.80	10,300.00	812.80	1,000.00	8,000.00	do				
Stutsman	93,440.20	79,000.00	1,440.20	3,000.00	10,000.00	do				
Towner	48,161.04	40,637.22	799.00	1,300.00	5,424.82	do				
Traill	32,352.80	26,100.00	1,652.80	1,600.00	3,000.00	do				
Walsh	65,293.02	61,218.42	1,574.60	2,500.00						
Ward	86,521.00	80,000.00	1,505.00	3,000.00	2,016.00	Special road and bridge fund				
Wells	51,316.53	44,229.13	1,044.40	43.00	6,000.00	do				
Williams	85,799.20	77,996.00	927.20	2,600.00	253.00	Emergency and donation fund	168	3	4.50	2,268.00
					1,755.00	Special road and bridge fund				
Total	2,402,383.52	2,016,419.64	44,900.60	84,092.95	214,283.58					42,686.75

NOTE.—Sioux County, newly organized, with no separate data available for 1914, is included in Morton County; Slope County, for the same reason, is included in Billings County.

OHIO.

TABLE 46.—*Revenue applied to roads and bridges outside of incorporated cities, 1914.*

County.	Total revenue applied to roads and bridges.	General county and township tax.	State-aid fund to counties.	Other revenue.	
				Amount.	Source.
Adams	$20,434.75	$13,748.41	$6,686.34		
Allen	127,246.29	112,008.46	15,237.83		
Ashland	9,669.09	8,436.05	1,233.04		
Ashtabula	35,708.71	35,095.28	613.43		
Athens	36,495.66	27,062.50	9,433.16		
Auglaize	55,563.09	27,119.70	3,443.39	$25,000.00	Special assessment.
Belmont	108,400.32	[1] 49,933.00	58,467.32		
Brown	16,716.89	15,310.98	1,405.91		
Butler	12,257.29	11,940.69	316.60		
Carroll	25,343.82	25,257.45	86.37		
Champaign	30,210.26	19,830.00	10,380.26		
Clark	69,092.99	64,702.61	4,390.38		
Clermont	63,854.46	[1] 62,708.00	1,146.46		
Clinton	24,795.00	24,795.00			
Columbiana	17,102.41	12,000.00	5,102.41		
Coshocton	11,932.81	11,918.41	14.40		
Crawford	18,435.95	17,449.49	986.46		
Cuyahoga	1,120,911.00	[1] 1,120,886.00	25.00		
Darke	14,361.69	14,237.19	124.50		
Defiance	21,289.92	14,371.60	5,218.32	1,700.00	Donations.
Delaware	45,942.45	45,000.00	942.45		
Erie	33,693.76	23,500.00	10,193.76		
Fairfield	50,908.91	50,908.91			
Fayette	18,638.27	10,400.00	8,238.27		
Franklin	105,010.32	[2] 68,386.64 25,000.00	11,623.68		
Fulton	90,311.83	[1] 72,553.00	1,895.75	15,863.08	Special assessment.
Gallia	9,563.64	6,681.00	2,882.64		
Geauga	39,898.04	35,000.00	4,898.04		
Greene	95,040.91	[1] 85,434.00	9,606.91		
Guernsey	63,874.65	[2] 30,000.00 29,270.43	4,604.22		
Hamilton	290,429.36	287,042.00	3,387.36		
Hancock	107,369.19	106,000.00	1,369.19		
Hardin	55,433.81	[1] 50,494.00	4,939.81		
Harrison	50,384.78	20,100.00	14,284.78	16,000.00	State highway.
Henry	21,916.28	21,301.94	614.34		
Highland	26,321.03	24,204.00	2,117.03		
Hocking	14,781.98	5,228.18	2,040.73	7,513.07	Special tax.
Holmes	8,159.24	8,090.69	68.55		
Huron	69,805.33	24,189.43	45,615.90		
Jackson	11,044.40	10,562.00	482.40		
Jefferson	124,739.71	[1] 123,324.00	1,415.71		
Knox	37,740.34	37,728.34	12.00		
Lake	77,653.33	[2] 26,431.16 8,620.56	26,000.00	16,601.61	Other sources.
Lawrence	74,655.83	40,000.00	2,155.83	30,000.00 2,500.00	Do. Automobile tax.
Licking	73,151.68	21,850.00	49,951.68	1,350.00	Special road tax.
Logan	52,381.51	52,198.87	182.64		
Lorain	89,467.65	[2] 3,752.55 49,505.78	36,209.32		
Lucas	219,576.00	[1] 219,534.00	42.00		
Madison	48,138.93	[3] 48,138.93			
Mahoning	117,003.01	[3] 84,196.02	2,806.99	30,000.00	Other sources.
Marion	20,953.25	20,017.76	935.49		
Medina	65,364.39	[2] 21,870.00 23,500.00	19,994.39		
Meigs	3,704.01	3,497.12	206.89		
Mercer	12,547.60	2,659.20	9,888.40		
Miami	380,072.12	44,000.00	72.12	16,000.00 320,000.00	General. Emergency bridge funds.
Monroe	15,767.95	15,689.11	78.84		
Montgomery	124,660.22	79,535.50	42,455.72	2,669.00	Franchise tax.
Morgan	9,529.60	9,294.27	235.33		
Morrow	2,982.00	2,964.00	18.00		
Muskingum	102,272.16	[1] 57,594.00	44,678.16		
Noble	50,357.60	16,811.93	1,545.67	32,000.00	Other sources.
Ottawa	19,977.41	7,568.63	12,408.78		
Paulding	105,610.85	15,200.00	410.85	90,000.00	Special levy on benefited land.
Pickaway	37,891.28	23,751.88	14,139.40		
Perry	36,815.95	[1] 36,763.00	52.95		
Pike	11,878.13	4,425.49	7,452.64		
Portage	119,676.23	98,514.80	21,161.43		
Preble	62,912.87	57,450.00	2,962.87	2,500.00	Repair fund.

[1] Expenditures for the year 1913, taken from Bulletin No. 23, State Highway Department.
[2] Township.
[3] Incorporated township.

OHIO—Continued.

TABLE 46.—*Revenue applied to roads and bridges outside of incorporated cities, 1914*—Continued.

County.	Total revenue applied to roads and bridges.	General county and township tax.	State-aid fund to counties.	Other revenue.	
				Amount.	Source.
Putnam	$108,965.10	$98,313.00	$10,652.10		
Richland	42,890.46	38,000.00	4,890.46		
Ross	41,507.58	30,390.00	11,117.58		
Sandusky	33,765.07	21,103.95	12,661.12		
Scioto	178,306.13	55,500.00	11,806.13	$111,000.00	Special road tax.
Seneca	35,191.65	34,463.59	728.06		
Shelby	33,886.00	33,868.00	18.00		
Stark	292,942.22	[1] 292,172.00	770.22		
Summit	104,638.22	27,210.00	45,435.39	31,992.83	Special assessments.
Trumbull	111,191.83	29,218.00	81,973.83		
Tuscarawas	147,605.17	137,240.00	8,137.17	2,228.00	Collected from property owners.
Union	51,717.00	51,693.00	24.00		
Van Wert	3,783.75	3,479.00	304.75		
Vinton	26,649.19	[1] 20,292.00	6,357.19		
Warren	6,518.00	6,500.00	18.00		
Washington	60,090.50	[2] 20,000.00 29,594.46	10,496.04		
Wayne	141,887.27	112,000.00	29,887.27		
Williams	12,699.29	5,016.04	7,683.25		
Wood	110,321.22	[2] 50,000.00	321.22	60,000.00	Road repair.
Wyandot	187,088.45	[1] 185,485.00	1,603.45		
Total	6,877,476.29	5,266,081.98	796,476.72	814,917.59	
	[3] 1,072,413.95				
	[4] 6,384,355.74				
Grand total	14,334,245.98				

[1] Expenditures for the year 1913, taken from Bulletin No. 23, State Highway Department.
[2] Township.
[3] Expenditures by State highway department in addition to disbursements to counties.
[4] Bond money spent 1914.

OREGON.

TABLE 47.—*Revenue applied to roads and bridges, 1914.*

County.	Total revenue applied to roads and bridges.	General county tax.		Other revenue applied to roads.	
		Rate, mills per $1.	Amount.	Amount.	Source.
Baker	$51,901.90			$48,938.49 870.38 2,093.03	General fund. United States forest rentals. Motor licenses.
Benton	70,287.44	5	$44,000.00	[1] 26,287.44	Miscellaneous sources.
Clackamas	368,214.85	8	240,000.00	[1] 128,214.85	Do.
Clatsop	100,000.00		100,000.00		
Columbia	175,500.00	9.5	175,500.00		
Coos	220,205.21		[2] 220,205.21		
Crook	128,732.46	3.5	24,385.01	7,930.00 [1] 96,417.45	General levy. Miscellaneous sources.
Curry	38,613.62		22,638.40	2,200.00 [1] 13,775.22	United States forest fund. Miscellaneous sources.
Douglas	168,500.00	5	167,000.00	300.00 1,200.00	United States forest fund. Motor licenses.
Gilliam	55,000.00		30,000.00	25,000.00	Motor licenses.
Grant	27,639.88	4	23,512.19	[1] 4,127.69	Miscellaneous sources.
Harney	23,535.48	3	21,752.92	841.09 477.61 463.86	United States forest rentals. Land sales. Motor licenses.
Hood River	81,343.38	5	42,400.00	[1] 38,943.38	Miscellaneous sources.
Jackson	71,236.31		71,236.31		
Josephine	40,000.00		40,000.00		
Klamath	62,550.00	4	60,000.00	2,550.00	United States forest rentals.
Lake	33,800.64	2.1	17,541.45	1,951.44 619.29 [1] 13,688.46	United States forest rentals and land sales. Motor licenses. Miscellaneous sources.
Lane	159,482.09		25,000.00	21,655.45 [1] 112,826.64	Special road tax. Miscellaneous sources.
Lincoln	71,795.58	7	71,795.58		
Linn	152,896.89		[2] 152,896.89		

[1] Oregon road expenditure report.
[2] Includes miscellaneous revenue.

OREGON—Continued.

TABLE 47.—*Revenue applied to roads and bridges, 1914*—Continued.

County.	Total revenue applied to roads and bridges.	General county tax.		Other revenue applied to roads.	
		Rate mills per $1.	Amount.	Amount.	Source.
Malheur	45,103.13	4	41,039.14	1,000.00	Motor licenses.
				[1] 3,063.99	Miscellaneous sources.
Marion	261,115.13	.....	261,115.13	.....	
Morrow	28,500.00	2.5	27,000.00	1,500.00	Donations.
Multnomah	639,335.07	1.8	600,172.45	27,217.06	Motor licenses.
				11,945.56	Sale of rock and gravel.
Polk	103,593.62	.....	85,000.00	4,500.00	Special road tax.
				[1] 14,093.62	Miscellaneous sources.
Sherman	31,684.25	3	25,685.95	[1] 5,998.30	Do.
Tillamook	188,539.65	9.8	188,539.65	.....	
Umatilla	119,556.47	2.5	100,000.00	[1] 19,556.47	Do.
Union	46,236.23	2	30,000.00	[1] 16,236.23	Do.
Wallowa	40,005.91	.....	30,000.00	3,000.00	United States forest rentals.
				[1] 7,005.91	Miscellaneous sources.
Wasco	54,090.65	3	42,964.08	[1] 11,126.57	Do.
Washington	195,236.83	.....	[2] 195,236.83	.....	
Wheeler	20,116.16	5	20,116.16	.....	
Yamhill	64,729.68	5	62,512.24	43.53	United States forest rentals.
				2,173.91	Motor licenses.
Total	3,939,078.51	.....	3,259,245.59	679,832.92	
	[3] 1,122,817.65				
	[4] 248,570.60				
Grand total	5,310,466.76				

[1] Oregon road expenditure report.
[2] Includes miscellaneous revenue.
[3] Expended in 1914 from county bond issue funds.
[4] Revenue from State tax applied to roads, 1914. Includes a State appropriation of $10,000 for salary, office and fixed expenses of the State Highway Engineer.

SOUTH DAKOTA.

TABLE 48.—*Revenue applied to roads and bridges, 1914.*

County.	Total county and township expenditures from all sources for roads and bridges.	Road and bridge levy, mills per $1.	County.	Total county and township expenditures from all sources for roads and bridges.	Road and bridge levy, mills per $1.
Aurora	$13,249.90	.6	Hyde	123.00	.05
Beadle	20,166.85	.7	Jackson	15.00	.....
Bennett	181.85	.6	Jerauld	12,645.61	.8
Bonhomme	42,486.79	1.5	Kingsbury	6,146.07	.1
Brookings	37,060.77	1.16	Lake	6,532.92	.4
Brown	45,272.79	.6	Lawrence	134,659.20	3
Brule	5,570.47	.32	Lincoln	41,463.04	1.25
Buffalo	3,398.88	1.5	Lyman	12,926.57	3.5
Butte	50,090.06	4.12	McCook	9,227.97	.7
Campbell	12,869.43	1	McPherson	6,963.83	.9
Charles Mix	62,889.96	1.75	Marshall	3,501.31	.1
Clark	.....	.20	Meade	19,434.32	1.5
Clay	11,455.10	1.5	Mellette	3,508.39	1.2
Codington	7,027.64	.6	Miner	19,908.67	.58
Corson	20,476.28	3	Minnehaha	60,995.17	1.32
Custer	5,688.82	.8	Moody	19,140.42	.5
Davison	23,520.62	1.6	Pennington	45,141.93	.....
Day	12,481.68	.5	Perkins	679.02	.8
Deuel	12,339.28	1.16	Potter	2,301.75	.5
Dewey	4,098.15	1.9	Roberts	16,019.38	.6
Douglas	10,652.62	.4	Sanborn	30,495.79	1.3
Edmunds	.....	.1	Spink	26,174.63	.8
Fall River	24,856.64	3	Stanley	20,078.46	2.7
Faulk	5,054.30	.5	Sully	1,774.33	.....
Grant	2,209.00	.....	Tripp	18,470.18	1.2
Gregory	19,896.19	2	Turner	29,114.64	1
Haakon	.....	.....	Union	21,246.62	1.15
Hamlin	11,112.98	.5	Walworth	13,156.64	1.25
Hand	25,567.65	.6	Yankton	71,570.87	.....
Hanson	23,091.34	1.2	Ziebach	2,669.55	1.7
Harding	12,785.11	1.5			
Hughes	6,510.90	.5	Total	1,217,809.42	
Hutchinson	29,662.09	1			

UTAH.

TABLE 49.—*Revenue applied to roads and bridges, 1914.*

County.	Total revenue applied to roads and bridges.	General county tax.		Other revenue applied to roads and bridges.	
		Rate, mills per $1.	Amount.	Amount.	Source.
Beaver	$9,932.00	5	$3,890.00	$642.00	Poll tax.
				5,400.00	State and county appropriation.
Boxelder [1]	26,777.93	1	12,307.26	14,470.67	General fund.
Cache	[2] 38,262.07	.....	.....	38,262.07	From all sources.
Carbon [3]	.....	.....	.....	.....	
Davis	59,257.32	5	33,297.00	25,960.32	General county levy.
Emery	11,216.84	3	10,171.75	1,045.09	Forest reserve fund.
Garfield	17,094.60	.....	14,594.60	2,500.00	Do.
Grand	6,484.13	5	4,612.00	1,872.13	Special road tax, 1 mill.
Iron	3,968.86	2	3,968.86	.....	
Juab	5,316.93	1	5,316.93	.....	
Kane	3,270.91	5	3,270.91	.....	
Millard	18,000.00	6	18,000.00	.....	
Morgan	4,617.13	2.5	4,617.13	.....	
Piute	2,523.00	.....	2,433.00	90.00	Poll tax.
				216.00	Do.
Rich	7,469.09	5	6,253.09	1,000.00	General county fund.
Salt Lake	182,238.25	.....	.....	182,238.25	Appropriation from the general county tax fund.
San Juan	5,378.97	5	4,196.05	1,182.92	Forest reserve fund.
Sanpete	33,336.65	.....	26,475.44	6,861.21	General fund.
Sevier	13,683.38	.....	11,883.38	1,800.00	County appropriation.
Summit [1]	31,320.06	.....	19,021.94	12,298.12	General fund.
Tooele	[2] 24,673.17	.....	.....	24,673.17	From all sources.
Uintah	13,871.10	.....	10,312.53	175.10	Poll tax.
				3,383.47	General county fund.
Utah [3]	.....	.....	.....	.....	
Wasatch	15,897.90	.....	5,702.08	150.00	Poll tax.
				1,187.26	Forest reserve fund.
				8,858.56	State and county appropriation.
Washington	6,480.36	.....	[4] 5,868.57	360.50	Poll tax.
				251.29	Forest reserve fund.
Wayne	4,870.26	3	4,870.26	.....	
Weber	92,498.45	5	52,498.45	40,000.00	County appropriation.
Total	638,439.36	.....	263,561.23	374,878.13	
	[5] 6,899.27				
	[6] 157,732.00				
Grand total	803,070.63				

[1] 1915 report; no report available for 1914.
[2] Spent from all sources; no division of expenditures.
[3] No revenue report received.
[4] Includes appropriation from "General fund."
[5] Expended from county bond issues.
[6] State funds applied to roads.

NOTE.—Duchesne County not created in time for 1914 road report

WASHINGTON.

TABLE 50.—*Revenue applied to roads and bridges, 1914.*

County.	Total revenue applied to roads and bridges.	General State, county, and township tax.	Other revenue applied to roads.	
			Amount.	Source.
Adams	$112,046.29	$106,945.23	$5,101.06	Petition assessment.
Asotin	37,500.72	37,500.72		
Benton	64,850.36	64,850.36		
Chelan	133,900.74	133,900.74		
Clallam	134,729.60	134,729.60		
Clarke	156,061.77	151,061.77	5,000.00	Donations.
Columbia	96,041.75	96,041.75		
Cowlitz	131,503.34	131,503.34		
Douglas	79,495.08	79,495.08		
Ferry	39,621.71	39,621.71		
Franklin	77,558.39	77,558.39		
Garfield	59,624.50	59,624.50		
Grant	102,976.49	102,976.49		
Grays Harbor	371,598.00	371,598.00		
Island	31,068.61	31,068.61		
Jefferson	81,075.34	81,075.34		
King	1,214,372.56	1,211,827.68	2,544.88	Sale of forest reserve timber.
Kitsap	62,834.38	62,834.38		
Kittitas	120,759.57	120,759.57		
Klickitat	115,286.02	115,286.02		
Lewis	293,984.10	276,938.28	17,045.82	Miscellaneous receipts.
Lincoln	180,941.94	180,941.94		
Mason	79,175.09	79,175.09		
Okanogan	88,567.13	88,567.13		
Pacific	190,818.25	190,818.25		
Pend Oreille	66,599.81	63,658.96	2,940.85	Kaniksu national forest appropriation.
Pierce	560,469.67	541,710.74	[3]18,758.93	Donations to county.
San Juan	17,051.83	17,051.83		
Skagit	216,233.06	215,688.58	544.48	Miscellaneous sources.
Skamania	59,535.60	59,535.60		
Snohomish	445,648.81	445,648.81		
Spokane	538,049.48	533,478.22	4,571.26	Permanent highway contracts paid by abutting property owners.
Stevens	97,870.34	97,870.34		
Thurston	141,684.83	141,684.83		
Wahkiakum	28,485.36	28,485.36		
Walla Walla	132,247.63	132,247.63		
Whatcom	427,043.38	228,143.57	198,899.81	Miscellaneous sources.
Whitman	278,152.51	271,923.19	6,229.32	Assessments of abutting property.
Yakima	325,106.84	325,106.84		
Total	7,390,570.88	7,128,934.47	261,636.41	
	[1] 509,146.50			
	[2] 45,000.00			
Grand total	7,944,717.38			

[1] County and district road bond expenditures, 1914.
[2] State appropriation for maintenance of State highway department.

WISCONSIN.

TABLE 51.—*Revenue applied to roads and bridges, 1914.*

County.	Total revenue applied to roads and bridges.	General county and township tax.	General State tax apportioned to counties.	Number of men who worked out poll tax.	Cash value from poll tax labor levy ($1.50).
Adams	$45,876.00	$40,435.00	$3,929.00	1,008	$1,512.00
Ashland	74 739.00	66,500.00	8,239.00	.....	.....
Barron	103,416.00	88,845.00	13,110.00	974	1,461.00
Bayfield	130,445.00	123,067.00	7,378.00	.....	.....
Brown	184,491.50	154,190.00	27,684.00	1,745	2,617.50
Buffalo	103,078.00	91,896.00	9,736.00	964	1,446.00
Burnett	53,576.50	48,053.00	3,584.00	1,293	1,939.50
Calumet	85,968.00	70,241.00	14,260.00	978	1,467.00
Chippewa	151,026.00	134,440.00	15,611.00	650	975.00
Clark	150,228.00	132,885.00	15,237.00	1,404	2,106.00
Columbia	156,257.00	131,341.00	23,647.00	846	1,269.00
Crawford	75,591.00	66,357.00	7,440.00	1,196	1,794.00
Dane	346,787.00	270,471.00	73,738.00	1,719	2,578.00
Dodge	197,257.00	153 266.00	41,240.00	1,834	2,751.00
Door	72,014.00	61,040.00	9,033.00	1,294	1,941.00
Douglas	172,922.00	147,190.00	25,687.00	30	45.00
Dunn	125,956.00	110,912.00	13,277.00	1,178	1,767.00
Eau Claire	66,543.00	51,274.00	14,615.00	436	654.00
Florence	26,118.00	23,814.00	2,304.00	.....	.....
Fond du Lac	174,882.00	135,661.00	36,383.00	1,892	2,838.00
Forest	65,776.00	60,730.00	5,046.00	.....	.....
Grant	228,095.00	195,923.00	30,540.00	1,088	1,632.00
Green	201,193.00	176,948.00	23,155.00	727	1,090.50
Green Lake	58,800.00	46,558.00	11,492.00	500	750.00
Iowa	130,560.00	109,964.00	19,309.00	858	1,287.00
Iron	51,686.00	47,248.00	4,438.00	.....	.....
Jackson	95,120.50	85,640.00	8,384.00	731	1,096.50
Jefferson	147,092.00	117,303.00	28,010.00	1,186	1,779.00
Juneau	87,600.00	77,878.00	8,087.00	1,090	1,635.00
Kenosha	134,411.00	110,650.00	23,761.00	.....	.....
Kewaunee	84.996.00	72,593.00	10,258.00	1,430	2,145.00
La Crosse	172,456.00	150,219.00	21,298.00	626	939.00
Lafayette	121,492.00	99,740.00	20,204.00	1,032	1,548.00
Langlade	81,412.00	70,916.00	8,918.00	1,052	1,578.00
Lincoln	78,294.00	68,720.00	8,950.00	416	624.00
Manitowoc	211,867.00	179,698.00	29,166.00	2,002	3,003.00
Marathon	203,437.00	177,012.00	25,414.00	674	1,011.00
Marinette	100,450.00	88,056.00	12,394.00	.....	.....
Marquette	35,124.50	27,249.00	5,903.00	1,315	1,972.50
Milwaukee	914,261.00	636,504.00	277,757.00	.....	.....
Monroe	171,999.50	155,004.00	13,937.00	2,039	3,058.50
Oconto	106,539.50	94,570.00	10,150.00	1,213	1,819.50
Oneida	79,324.00	73,860.00	5,464.00	.....	.....
Outagamie	197,325.50	167,882.00	27,657.00	1,191	1,786.50
Ozaukee	58,924.50	46,618.00	11,543.00	509	763.50
Pepin	44,369.00	39,210.00	3,845.00	876	1,314.00
Pierce	119,135.50	105,649.00	11,652.00	1,223	1,834.50
Polk	102,711.00	88,658.00	11,518.00	1,690	2,535.00
Portage	92,236.50	77,056.00	13,115.00	1,377	2,065.50
Price	84,365.50	77,940.00	6,034.00	261	391.50
Racine	173,874.00	133,979.00	39,595.00	200	300.00
Richland	134,349.00	119,584.00	13,559.00	804	1,206.00
Rock	199,385.00	156,454.00	42,931.00	.....	.....
Rusk	84,936.00	78,941.00	5,783.00	148	212.00
St. Croix	105,753.50	89,068.00	14,917.00	1,179	1,768.50
Sauk	233,102.50	207,014.00	24,026.00	1,375	2,062.50
Sawyer	58,612.00	54,540.00	4,072.00	.....	.....
Shawano	142,630.00	123,937.00	14,214.00	2,986	4,479.00
Sheboygan	228,322.00	189,664.00	34,533.00	2,750	4,125.00
Taylor	99,913.50	92,849.00	6,733.00	221	331.50
Trempealeau	151,145.00	135,875.00	12,636.00	1,756	2,634.00
Vernon	140,454.00	121,892.00	15,715.00	1,898	2,847.00
Vilas	36,695.00	33,695.00	3,000.00	.....	.....
Walworth	136,150.50	106,218.00	29,715.00	145	217.50
Washburn	60,416.00	55,499.00	3,870.00	698	1,047.00
Washington	95,757.50	74,462.00	18,723.00	1,715	2,572.50
Waukesha	135,940.00	106,709.00	28,847.00	256	384.00
Waupaca	137,266.00	117,685.00	18,093.00	992	1,488.00
Waushara	58,898.50	47,522.00	10,100.00	851	1,276.50

WISCONSIN—Continued.

TABLE 51.—*Revenue applied to roads and bridges, 1914*—Continued.

County.	Total revenue applied to roads and bridges.	General county and township tax.	General State tax apportioned to counties.	Number of men who worked out poll tax.	Cash value from poll tax labor levy ($1.50).
Winnebago	$159,345.50	$123,047.00	$34,938.00	907	$1,360.50
Wood	101,869.00	86,330.00	15,173.00	244	366.00
Total	9,433,039.50	7,882,838.00	1,454,704.00	.....	95,497.50
	[1] 87,000.00				
	[2] 320,000.00				
	[3] 40,201.00				
Grand total	9,880,240.50				

[1] Appropriated from State general fund for support of State highway commission.
[2] Local funds left over from 1913 and spent on roads in 1914.
[3] Bond-money expenditures.

WYOMING.

TABLE 52.—*Revenue applied to roads and bridges, 1914.*

County.	Total revenue applied to roads and bridges.	
	Amount.	Source.
Albany	$620.00	Auto licenses.
	39,562.00	General county fund.
	1,686.60	Inheritance tax.
	503.02	National forest fund.
Bighorn	13,046.61	General county fund.
Campbell	9,385.89	Do.
Carbon	39,089.82	Do.
Converse	8,924.65	Do.
Crook	22,266.76	Do.
Fremont	19,705.79	Do.
Goshen	3,603.90	Do.
Hot Springs	6,865.59	Do.
Johnson	25,036.27	Do.
Laramie	11,184.12	Do.
Lincoln	39,150.49	Do.
Natrona	26,186.98	Do.
	525.00	Auto licenses.
	2,000.00	Poll tax.
Niobrara	2,500.00	General county fund.
	1,907.34	Auto and road licenses.
Park	17,692.56	General county fund.
	1,043.76	One-half forest reserve fund.
	412.00	Auto licenses.
Platte	11,991.60	General county fund and auto tax.
Sheridan	30,000.00	General county fund.
Sweetwater	3,900.00	County road poll tax.
	1,284.00	Auto licenses.
	705.00	State forest reserve.
	213.00	Inheritance tax.
	38,000.00	General county fund.
Uinta	30,057.69	Do.
Washakie	1,003.98	State allotment.
	2,000.00	County road tax.
	576.00	Forest reserve and poll tax.
Weston	10,584.89	General county fund.
Total	423,215.31	
	[1] 6,237.00	
	[2] 240,208.85	
Grand total	669,661.16	

[1] State appropriation for equipment of State convict camps.
[2] Expended by United States Government for repair and betterments of roads in Yellowstone National Park during fiscal year 1914–15.

APPENDIX C.

The following are tables referred to in the foregoing text giving information as to road bond issues in the States discussed:

ARIZONA.

TABLE 53.—*Road and bridge bonds, 1914.*

County.	Total road and bridge bonds outstanding Jan. 1, 1915.	Bonds voted in 1914.	Bonds sold in 1914.	Interest rate.	Term of bonds sold.	Bonds retired in 1914.
				Per cent	*Years.*	
Apache	$145,000	$125,000	$125,000	5	30	$5,000
Greenlee	150,000	150,000	150,000	.....	.....	.....
Total	295,000	275,000	275,000	.....	.....	5,000

CALIFORNIA.

TABLE 54.—*Road and bridge bonds, 1914.*

County.	Total road and bridge bonds outstanding Jan. 1, 1915.	Bonds voted in 1914.	Bonds sold in 1914.	Interest rate.	Term of bonds sold.	Bonds retired in 1914.
				Per cent.	*Years.*	
Colusa	$392,000	$392,000	$392,000	.....	.....	.....
Glenn	369,000	.....	.....	.....	.....	.....
Kern	1,074,000	.....	.....	.....	.....	$23,000
Los Angeles	3,500,000	.....	.....	.....	.....	100,000
Monterey	[1] 570,000	570,000	[1] 570,000	6	10	.....
Orange	1,285,000	.....	.....	.....	.....	45,000
Sacramento	600,000	.....	.....	.....	.....	.....
San Benito	280,000	.....	.....	.....	.....	10,000
San Bernardino	[2] 1,750,000	1,750,000	[2] 1,750,000	5	22½	.....
San Diego	1,064,000	.....	.....	.....	.....	31,000
San Joaquin	1,700,000	.....	.....	.....	.....	50,000
San Mateo	1,250,000	.....	.....	.....	.....	.....
Santa Barbara	191,000	.....	.....	.....	.....	12,000
Ventura	252,000	.....	.....	.....	.....	.....
Total	14,277,000	2,712,000	[3] 2,712,000	.....	.....	271,000
	[4] 18,000,000	.....	.....	.....	.....	.....
Grand total	32,277,000	.....	.....	.....	.....	.....

[1] Sold Jan. 5, 1915. [2] Sold Feb. 8, 1915. [3] Exclusive of State bonds. [4] State road bonds.

IDAHO.

TABLE 55.—*County and district road and bridge bonds, 1914.*

County.	Total road and bridge bonds outstanding Jan. 1, 1915.	Bonds voted in 1914.	Bonds sold in 1914.	Interest rate.	Term of bonds sold.
				Per cent.	*Years.*
Bear Lake		$50,000			
Gooding [1]	$154,000				
Jefferson [1]	120,000				
Lincoln [1]	180,000	100,000	$100,000	6	20
Madison	50,000	50,000	50,000	5½	10–20
Nez Perce	100,000	100,000	100,000	5	20
Oneida	5,000				
Power	125,000	125,000	125,000	6	20
Twin Falls	100,000				
Total	834,000 [2] 505,000	425,000	375,000		
Grand total	1,339,000				

[1] District bonds. [2] State bonds.

ILLINOIS.

TABLE 56.—*Road and bridge bonds, 1914.*

County and township.	Total bonds outstanding Jan. 1, 1915.	Bonds voted in 1914.	Bonds sold in 1914.	Interest rate.	Term of bonds sold.	Bonds retired in 1914.
				Per cent.	*Years.*	
Christian, Johnson		[1] $17,000.00				
Clay, Hartee	[2] $1,420.00					$200.00
Cook		[1] 2,000,000.00				
Douglas, Sargent	[3] 23,000.00					6,000.00
Edgar:						
Embarass	[3] 24,500.00					4,500.00
Paris	[3] 130,000.00					20,000.00
Do	50,000.00		[4] 50,000.00	5		
Ross	[3] 40,000.00		[4] 40,000.00	15		2,700.00
Iroquois:						
Sheldon	[5] 20,000.00					7,400.00
Belmont						5,000.00
Henry, Atkinson	[2] 1,900.00					1,000.00
Jackson, Carbondale	[3] 35,000.00					
Jefferson, Mount Vernon	[3] 40,000.00	40,000.00	40,000.00	5	10	
Lawrence:						
Bond	[2] 5,000.00					
Denison	[3] 30,000.00	35,000.00		5		
Lawrence	[3] 23,000.00					12,000.00
Lee:						
Harmon	[2] 3,000.00	3,000.00	3,000.00	6	7	
East Grove	500.00	500.00	500.00	6	1	
Viola	[2] 10,000.00	10,000.00	10,000.00	6	7	
Madison, St. Jacobs	[2] 8,000.00		[4] 4,000.00	4½	15	1,000.00
Marshall, Hopewell	[2] 2,500.00		2,500.00	5	1, 2, 3, 4, and 5	
Ogle:						
Dement	[3] 9,000.00					3,000.00
Brookville	2,383.25		[4] 850.00	6	2	
Eagle Point	[3] 3,665.72					3,591.88
Oregon	6,000.00	6,000.00	6,000.00	5	1	
Rockvale	[5] 11,000.00					3,000.00
Woosung	[3] 3,000.00					3,000.00 [6] 20,556.75
Pike	[2] 8,300.00					
St. Clair	[3] 27,835.00					
Stephenson, Loren	[2] 8,000.00	8,000.00	5,000.00	5 or 6	1 to 8	250.00
Vermilion		[7] 1,500,000.00		4	[8]	
Blount	[2] 5,000.00		[4] 2,500.00	6	1 and 2	
Danville	[3] 86,600.00					37,000.00
Grant	[3] 3,132.58					3,099.10
Jamaica	[3] 19,000.00					6,333.00

[1] Voted 1914, but not sold.
[2] Bridge.
[3] Road.
[4] Voted 1913 and sold 1914.
[5] Road and bridge.
[6] Combined township bond expenditure and bond retirement.
[7] Sale postponed by suit against county.
[8] 20-year serial.

ILLINOIS—Continued.

TABLE 56.—*Road and bridge bonds, 1914*—Continued.

County and township.	Total bonds outstanding Jan. 1, 1915.	Bonds voted in 1914.	Bonds sold in 1914.	Interest rate.	Term of bonds sold.	Bonds retired in 1914.
				Per cent.	*Years.*	
Wayne:						
Massilon	[2] $2,400.00					
Big Mound	[2] 10,125.00					
Leech	[3] 4,000.00					$2,283.61
White	[4] 49,500.00					16,000.00
Whiteside:						
Erie	[3] 7,000.00	[1] $2,000.00				
Sterling	[2] 13,000.00					3,000.00
Will:						
Custer	[2] 2,000.00					1,000.00
Crete	[3] 35,000.00					
Washington	[3] 35,000.00	35,000.00	$35,000.00	5		
Total	798,761.55	3,656,500.00	199,350.00			161,914.34

[1] Voted 1914, but not sold. [2] Bridge. [3] Road. [4] Road and bridge.

INDIANA.

TABLE 57.—*Township road and bridge bonds, 1914.*

County.	Total bonds outstanding Jan. 1, 1915.	Bonds voted in 1914.	Bonds sold in 1914.	Interest rate.	Term of bonds sold.	Bonds retired in 1914.
				Per cent.	*Years.*	
Adams	$612,259.46	$60,163.17	$108,984.91	4½		$127,612.06
Allen	700,847.00		527,653.96	4½		25,100.02
Bartholomew	282,165.25		78,777.54			66,372.83
Benton	710,354.00		152,177.56			130,000.00
Blackford	366,648.46	208,254.40	127,401.98	4½	10	53,888.65
Boone	232,024.00		89,970.10	4½	10	30,334.15
Brown						
Carroll	450,283.00	93,118.46	40,351.68	4½	10	80,389.91
Cass	683,743.29	108,696.59	108,696.59	4½	10	120,000.00
Clark	329,730.00	17,194.00	17,194.00	4½	10	52,645.24
Clay	415,604.37	57,600.00	57,995.34	4½	10	86,487.28
Clinton	708,203.05	98,160.00	98,160.00	4½	10	122,048.89
Crawford	68,759.20	17,820.00	17,820.00	4½	10	14,229.80
Daviess	427,389.24		123,136.26	4½	10	88,010.15
Dearborn	264,365.12	56,039.74	138,844.16	4½	10-20	23,900.84
Decatur	564,847.60		71,457.13			82,816.45
Dekalb						
Delaware	743,435.00	27,880.00	146,662.50	4½		142,451.07
Dubois	194,734.95	10,720.00	12,356.00	4½	20	23,361.32
Elkhart	268,000.00	172,635.15	95,154.91	4½	10	16,136.51
Fayette	81,060.67		29,936.51	4½	20	8,808.33
Floyd	160,440.00	92,320.00	68,602.51	4½	20	5,166.75
Fountain	527,443.50		189,314.50	4½	10	64,821.15
Franklin	227,159.00	18,180.00	18,354.15	4½	10	27,400.37
Fulton	86,739.20	241,180.00	5,360.00	4½		
Gibson	557,358.00		52,355.00			76,876.81
Grant	857,583.06	133,480.00	272,104.64	4½	10	164,007.56
Greene	408,450.50		24,348.30		10	72,968.79
Hamilton	410,776.31		69,486.56		10	91,527.03
Hancock	196,378.30	46,700.00	56,907.24	4½	1-10	34,945.42
Harrison	232,252.00		21,471.40	4½	18	26,627.97
Hendricks	390,863.91		67,963.61	4½	10 and 20	62,309.20
Henry	86,978.00	111,408.00	54,952.89	4½	10 and 20	7,010.81
Howard	862,745.50	325,869.56	341,650.81	4½	10	119,386.10
Huntington	456,774.42		204,730.18	4½		76,505.85
Jackson	204,572.83		31,961.13	4½	10	47,561.41
Jasper	248,410.00		91,749.52	4½	10	34,608.71
Jay	359,033.94		49,191.13		10	59,646.33
Jefferson	221,193.30	59,738.80	60,345.94	4½	10 and 20	21,873.40
Jennings	156,319.64		49,944.85		10	33,153.52
Johnson	187,834.30	73,880.00	74,466.79	4½	10	21,320.14
Knox	838,040.83		94,330.00	4½	10	257,506.53
Kosciusko	12,728.00	31,000.00	4,034.50	4½		1,152.40
Lagrange						
Lake	3,055,536.81		553,868.50	4½	10	358,514.42
Laporte	967,290.10	149,600.00	154,267.52	4½	10 and 20	117,674.04

INDIANA—Continued.

TABLE 57.—*Township road and bridge bonds, 1914*—Continued.

County.	Total bonds outstanding Jan. 1, 1915.	Bonds voted in 1914.	Bonds sold in 1914.	Interest rate.	Term of bonds sold.	Bonds retired in 1914.
				Per cent.	*Years.*	
Lawrence	$445,549.64	$8,000.00	$54,947.33	4½	5	$65,689.83
Madison	850,549.89	162,700.00	169,754.53	4½	10	152,440.95
Marion	144,659.20	.....	41,778.52	4½	10	82,515.17
Marshall	189,426.40	193,488.40	152,386.43	4½	20	10,169.24
Martin	103,279.00	4,200.00	8,297.14	4½	.....	17,035.70
Miami	545,839.88	115,360.00	92,679.16	4½	10	86,004.19
Monroe	267,721.19	.....	7,836.00	4½	10	67,826.58
Montgomery	793,857.00	136,200.00	177,635.70	4½	10	148,229.60
Morgan	396,723.90	.....	35,891.65	4½	10	52,760.65
Newton	412,071.90	.....	62,676.53	4½	10–20	64,046.60
Noble	12,000.00	17,040.00	12,036.27	4½	10	.....
Ohio	20,141.25	8,400.00	.....	.....	.....	4,279.45
Orange	190,125.00	.....	33,700.98	.....	.....	45,000.00
Owen	165,659.08	.....	24,754.94	.....	.....	31,804.50
Parke	416,549.98	34,559.00	51,916.46	4½	20	79,826.48
Perry	66,500.00	70,000.00	6,053.02	4½	20	.....
Pike	156,887.60	23,820.00	30,587.25	4½	20	19,623.82
Porter	710,526.50	.....	36,359.18	4½	10	104,918.99
Posey	535,111.86	41,000.00	62,206.30	4½	.....	60,807.85
Pulaski	332,823.85	71,480.00	56,374.19	4½	20	42,468.15
Putnam	646,126.00	155,676.04	155,676.04	4½	10, 20, and 40	102,425.09
Randolph	621,221.16	.....	148,300.61	4½	10	105,559.67
Ripley	266,639.00	40,400.00	46,651.25	4½	10	54,397.58
Rush	579,937.90	34,500.00	34,599.11	4½	10	99,726.04
St. Joseph	659,550.00	.....	90,611.80	4½	10	11,179.43
Scott	124,640.86	.....	25,440.00	.....	.....	22,728.42
Shelby	293,608.20	.....	91,778.74	4½	10	19,741.17
Spencer	81,483.50	.....	.....	.....	.....	14,885.97
Starke	283,711.44	42,700.00	58,654.95	4½	10	53,741.87
Steuben	.....	.....	.....	.....	.....	.....
Sullivan	714,681.36	.....	95,622.90	4½	10	101,614.78
Switzerland	134,546.80	.....	18,560.00	.....	10	10,875.32
Tippecanoe	767,826.78	122,400.00	72,372.31	4½	.....	70,000.00
Tipton	376,487.00	.....	44,443.23	4½	10	116,403.59
Union	44,680.30	.....	.....	.....	.....	9,926.81
Vanderburg	345,180.00	156,200.00	157,492.47	4½	10 and 20	39,663.04
Vermilion	416,724.00	72,000.00	91,756.09	4½	10	93,597.22
Vigo	777,755.68	.....	138,353.10	4½	10	79,949.95
Wabash	813,001.00	.....	188,134.52	4½	10	118,903.47
Warren	431,770.26	.....	69,511.67	.....	10	72,886.46
Warrick	88,107.00	.....	58,185.45	.....	.....	5,451.03
Washington	344,323.00	.....	45,405.94	4½	10	52,456.13
Wayne	311,088.00	19,000.00	101,743.75	4½	10	43,449.80
Wells	631,415.00	77,760.00	83,083.41	4½	10	124,172.70
White	449,876.25	77,700.00	78,689.03	4½	10	81,740.00
Whitley	179,947.50	.....	174,280.78	4½	10	1,333.97
Total	36,957,686.22	3,893,221.31	7,841,711.53	.....	.....	5,719,416.47

INDIANA—Continued.

TABLE 57A.—*County road and bridge bonds, 1914.*

County.	Total outstanding Jan. 1, 1915.	Bonds voted in 1914.	Bonds sold in 1914.	Interest rate.	Term of bonds sold.	Retired during 1914.
				Per cent.	*Years.*	
Cass	[1] $130,000.00					
Clark	[2] 7,875.00					$2,625
Dearborn	[1] 30,000.00					
Decatur	[1] 28,000.00					2,600
Delaware	[1] 75,387.50					4,075
Fayette	[1] 26,000.00	$10,000	$10,000			
Franklin	[1] 75,000.00	75,000	75,000			
Fulton	[1] 50,000.00			4½	20	
Harrison	[1] 22,500.00					1,250
Jefferson	[1 2] 82,200.00					5,000
Lake	[1] 434,500.00		135,811			81,500
Laporte	[1] 159,000.00					11,000
Lawrence	[1] 91,000.00					
Marion	[1] 1,799,000.00	450,000	450,000	4½	20	1,000
Martin	[1] 52,000.00		5,130			5,000
Morgan	[1] 26,000.00					13,000
Ohio	[2] 11,900.00					
Posey	[1] 36,000.00					4,000
Randolph	[1] 17,500.00					2,500
Rush	[2] 10,000.00					
Scott						2,000
Shelby	[1] 105,000.00					5,000
Spencer	[1] 22,600.00					10,700
St. Joseph	[1] 683,000.00	100,000				41,600
Switzerland	[1] 4,000.00					1,000
Tippecanoe	[3] 390,000.00					
Vigo	[1] 607,308.62					25,000
Washington	[1] 91,900.00		101,353			10,000
Wayne	[1] 40,000.00					20,000
White	[1] 30,000.00					
Total	5,137,671.12	635,000	777,294			237,850

[1] Bridge bonds. [2] Issued for the purchase of toll roads. [3] Road and bridge bonds.

IOWA.

TABLE 58.—*Road and bridge bonds, 1914.*

County.	Total road and bridge bonds outstanding Jan. 1, 1915.	Bonds voted in 1914.	Bonds sold in 1914.	Rate of interest.	Term of bonds sold.
				Per cent.	*Years.*
Adams	$12,000				
Allamakee	22,000				
Audubon	42,000			4½	
Boone	60,450			4½	
Calhoun	40,000			5	
Carroll	40,000			4	
Cass	94,000			4½	
Cedar	20,000			5½	
Cherokee	25,000			5	
Chickasaw	28,000	$28,000	$28,000	5	15
Clinton	57,000			5	
Crawford	50,000			4½	
Davis	42,500			4½	
Des Moines	3,000				
Fremont	126,000			4½	
Iowa	68,500	13,500	13,500	5	
Jackson	137,000				
Kossuth	72,000				
Lee	30,000				
Lucas	31,600			4½	
Madison	41,068	31,068	31,068	4½	
Mahaska	29,402				
Marion	65,000	65,000	65,000		
Mills	7,000			4½	
Page	49,260	49,260	49,260	5	5
Polk	285,000	130,000	130,000	5	18
Union	119,000	60,000	60,000	4½	
Wapello	77,000				
Warren	35,000				
Winneshiek	145,000			4	
Woodbury	21,000				
Wright	86,000				
Total	1,960,780	376,828	376,828		

MICHIGAN.

TABLE 59.—*Road and bridge bonds, 1914.*

County and township.	Bonds voted and sold in 1914.	Interest rate.	Term of bonds sold.
		Per cent.	*Years.*
Alger:			
Burt	$10,000.00	4-5	20
Limestone	12,000.00	4-5	20
Rockriver	12,000.00	4-5	20
Arenac:			
Turner	15,000.00	4-5	20
Berrien	130,000.00	4	15-20
St. Joseph	45,000.00	4-5	20
Lincoln	20,000.00	4-5	20
Royalton	30,000.00	4-5	20
Cheboygan	37,684.34	4	15-20
Dickinson:			
Felch	10,000.00	4-5	20
Genesee	111,670.89	4	15-20
Gladwin	77,120.00	4	15-20
Grand Traverse:			
Green Lake	18,000.00	4-5	20
Paradise	27,000.00	4-5	20
Long Lake	6,000.00	4-5	20
Whitewater	10,000.00	4-5	20
Houghton:			
Portage	20,000.00	4-5	20
Iron	50,000.00	.....	.....
Mastadon	30,000.00	4-5	20
Kalkaska:			
Clearwater	6,000.00	4-5	20
Cold Springs	5,000.00	4-5	20
Garfield	3,000.00	4-5	20
Kent	100,000.00	4	15-20
Lake:			
Sweetwater	3,000.00	4-5	20
Pleasant Plains	3,000.00	4-5	20
Lapeer:			
Almont	60,000.00	4-5	20
Lenawee:			
Ogden	30,000.00	4-5	20
Macomb:			
Warren	35,000.00	4-5	20
Lake	57,000.00	4-5	20
Mason:			
Riverton	2,000.00	4-5	20
Custer	2,000.00	4-5	20
Freesoil	1,000.00	4-5	20
Menominee	30,000.00	4	15-20
Midland:			
Ingersol	40,000.00	4-5	20
Mount Haley	16,800.00	4-5	20
Jerome	6,000.00	4-5	20
Monroe:			
Bedford	39,000.00	4-5	20
Whiteford	60,000.00	4-5	20
Ida	30,000.00	4-5	20
Summerfield	35,000.00	4-5	20
Newaygo:			
Wilcox	8,000.00	4-5	20
Croton	20,000.00	4-5	20
Ontonagon:			
Matchwood	10,000.00	4-5	20
McMillan	9,200.00	4-5	20
Stannard	10,000.00	4-5	20
Interior	10,000.00	4-5	20
Rockland	28,000.00	4-5	20
Carp Lake	20,000.00	4-5	20
Ottawa	133,506.00	4	15-20
Saginaw:			
Buena Vista	20,000.00	4-5	20
Blumfield	4,000.00	4-5	20
Frankenlust	40,000.00	4-5	20
Birch Run	20,000.00	4-5	20
Saginaw	10,000.00	4-5	20
Thomastown	7,500.00	4-5	20
Schoolcraft:			
Hiawatha	4,000.00	4-5	20
Shiawassee:			
Venice	30,000.00	4-5	20
Tuscola:			
Denmark	12,361.20	4-5	20
Gilford	16,900.00	4-5	20
Wayne	432,000.00	4	15-20
Total	2,080,742.43		

MINNESOTA.

TABLE 60.—*Road and bridge bonds, 1914.*

County.	Total outstanding road and bridge bonds January 1, 1915.	Bonds voted in 1914.	Bonds sold in 1914.	Interest rate.	Term of bonds sold.	Bonds retired in 1914.
				Per cent.	*Years.*	
Aitkin	$83,579	.....	.....	.....	.....	.....
Blue Earth	18,000	.....	.....	.....	.....	$2,000
Carlton	46,000	.....	.....	.....	.....	.....
Cass	210,000	.....	.....	.....	.....	.....
Cook	60,000	.....	.....	.....	.....	.....
Hennepin	110,000	.....	.....	.....	.....	.....
Hubbard	77,660	.....	.....	.....	.....	.....
Itasca	381,000	.....	$300,000	4	20	44,000
Kanabec	15,300	$5,000	5,000	4	10	2,192
Koochiching	300,000	.....	.....	.....	.....	.....
Nicollet	50,000	50,000	50,000	.....	.....	.....
Nobles	.....	4,000	.....	.....	.....	.....
Wadena	10,350	3,000	3,000	4	15	1,650
Winona	50,000	.....	.....	.....	.....	.....
Total	1,411,889	62,000	358,000	.....	.....	49,842

MISSOURI.

TABLE 61.—*Road and bridge bonds, 1914.*

County.	Total bonds outstanding January 1, 1915.	Bonds voted in 1914.	Bonds sold in 1914.	Interest rate.	Term of bonds sold.	Bonds retired in 1914.
				Per cent.	*Years.*	
Callaway	$82,000	.....	.....	.....	.....	$6,000
Cedar	18,500	.....	.....	.....	.....	500
Clinton	3,000	.....	.....	.....	.....	.....
Dade	44,000	.....	.....	.....	.....	3,000
Greene	7,000	.....	.....	.....	.....	1,500
Grundy	5,000	.....	.....	6	10	500
Howell	25,000	.....	.....	5	.....	.....
Jasper	25,000	$25,000	$25,000	6	2-14	.....
Lawrence	49,000	.....	.....	.....	.....	1,000
Newton	30,000	.....	.....	.....	.....	.....
Nodaway	65,000	50,000	50,000	5	5-15	15,000
Pettis	169,000	.....	.....	.....	.....	10,000
Total	522,500	75,000	75,000	.....	.....	37,500

MONTANA.

TABLE 62.—*Road and bridge bonds, 1914.*

County.	Total road and bridge bonds outstanding Jan. 1, 1915.	Bonds voted in 1914.	Bonds sold in 1914.	Interest rate.	Term of bonds sold.	Bonds retired in 1914.
				Per cent.	*Years.*	
Blaine	$40,000.00					
Broadwater		[1] $22,000		5½	20	
Carbon	274,000.00					
Cascade	45,000.00					
Custer	220,000.00					
Dawson	100,000.00					
Deer Lodge	12,050.72					
Fergus	225,000.00	225,000	$225,000	5	20	$33,000
Hill	100,000.00	100,000	100,000	5	20	
Lewis and Clark	105,000.00					
Lincoln	125,000.00					
Musselshell	120,000.00					
Rosebud	117,000.00					
Sanders	159,000.00	38,000	38,000	5	20	
Stillwater	270,000.00					
Sweet Grass	35,000.00					
Teton	100,000.00					
Valley	65,000.00					
Yellowstone	112,000.00	77,000	77,000	5	20	
Total	2,224,050.72	462,000	440,000			33,000

[1] Sold early in 1915.

NEVADA.

TABLE 63.—*Road and bridge bonds, 1914.*

County.	Total road and bridge bonds outstanding Jan. 1, 1915.	Bonds voted in 1914.	Bonds sold in 1914.	Interest rate.	Bonds retired in 1914.	Term of bonds sold.
				Per cent.		*Years.*
Douglas	$9,000				$1,000	
Esmeralda		$25,000	$25,000	6		2 to 6
Ormsby	29,000				2,000	
Total	38,000	25,000	25,000		3,000	

NEW MEXICO.

TABLE 64.—*Road and bridge bonds, 1914.*

County.	Total road and bridge bonds outstanding Jan. 1, 1915.	Bonds voted in 1914.	Bonds sold in 1914.	Interest rate.	Term of bonds sold.
				Per cent.	*Years.*
Dona Ana	$150,000	$50,000	$50,000	5	20 to 30
Eddy	7,000				
Total	157,000	50,000	50,000		

OHIO.

TABLE 65.—*Road and bridge bonds, 1914.*

County and township.	Total county and township bonds outstanding Jan. 1, 1915.	Bonds retired in 1914.	Bonds voted in 1914.	Bonds sold in 1914.	Interest rate.	Term of bonds sold.
					Per cent.	*Years.*
Allen		$46,814.00				
Ashland	$60,000.00		[1] $60,000.00	$60,000.00		
Ashtabula	[2] 282,322.23 [3] 78,000.00		180,000.00	71,000.00	5	10
Athens	[2] 200,000.00	100,000.00				
Auglaize	[2] 21,000.00 [3] 187,000.00	17,000.00	17,000.00 50,000.00	17,000.00 50,000.00	5	
Belmont	[2] 405,000.00	45,000.00				
Brown	[3] 9,500.00					
Butler	[2] 25,000.00 [3] 819,500.00	22,500.00	500,000.00	500,000.00	4½	
Carroll	[2] 10,000.00		10,000.00	10,000.00	5	10
Clark	[2] 30,000.00 [3] 77,500.00	12,500.00	30,000.00 42,000.00	30,000.00 42,000.00	5	
Clermont	[2] 50,000.00 [3] 135,000.00	12,500.00	[1] 50,000.00 [1] 25,000.00	50,000.00 25,000.00	5 5	1–10
Clinton						
Columbiana	[2] 331,250.00 [3] 60,000.00	10,500.00	121,750.00	121,750.00	5	10
Coshocton	[2] 13,198.12 [4] 106,277.48	10,000.00	[1] 14,700.00	14,700.00	5	1½
Crawford	[2] 50,000.00		50,000.00	50,000.00	5	
Cuyahoga	[2] 2,683,000.00 [3] 5,010,000.00	[3] 335,000.00 [2] 263,000.00	650,000.00 391,000.00	650,000.00 391,000.00	5 5	1–10 1–30
Defiance	[2] 128,300.00 [3] 118,000.00	15,960.00				
Delaware	[2] 600,000.00 [3] 310,000.00		144,400.00 100,000.00	144,400.00 100,000.00	5 5	10
Erie	[3] 33,500.00	3,000.00	40,000.00	40,000.00	6	2½
Franklin	[2] 1,201,040.00 [3] 308,000.00		394,000.00	394,000.00	5	1–10
Fulton	[2] 231,140.00	52,540.00	143,000.00	143,000.00	5	([5])
Gallia	[2] 355,000.00 [3] 34,000.00					
Geauga	[2] 13,000.00 [3] 6,400.00	4,400.00				
Guernsey	[3] 14,000.00 [2] 300,000.00		6,000.00 8,000.00 300,000.00	6,000.00 8,000.00 300,000.00	5½ 5 5	8 8 10
Hamilton	[4] 1,982,138.13	325,000.00	800,000.00	800,000.00	4½	30
Hancock	85,000.00 [2] 350,000.00 [3] 20,000.00	25,000.00	85,000.00 97,000.00	85,000.00 97,000.00	5 5	
Harrison	30,000.00		30,000.00	30,000.00	5	1–10
Henry	[2] 601,600.00 [3] 110,000.00		159,050.00	159,050.00	5	([5])
Hocking	[2] 25,000.00	5,000.00				
Holmes	[2] 6,000.00 [3] 41,000.00	8,000.00				
Huron	[2] 78,000.00 [3] 38,000.00		68,000.00	68,000.00	5	1–10
Jackson	[2] 340,000.00	20,000.00				
Knox	[3] 98,000.00	18,000.00	80,000.00	80,000.00	5	10
Lake	[2] 268,000.00 [3] 14,000.00	10,000.00	[1] 118,000.00	118,000.00	4½	1–20
Leroy	[2] 7,000.00		7,000.00	7,000.00	5	
Madison	[2] 36,000.00		36,000.00	36,000.00	5	
Painesville	[2] 18,000.00		18,000.00	18,000.00	5	2–11½
Willoughby	[2] 39,000.00	4,000.00				
Lawrence	[2] 700,000.00 [3] 40,000.00	15,000.00	100,000.00	100,000.00	5	20
Licking	[2] 500,000.00 [3] 250,000.00	136,853.00	95,000.00	95,000.00	5	10
Lorain	[2] 173,000.00 [3] 15,000.00		136,000.00 37,000.00	136,000.00 37,000.00	4½ 5	8 8
Brighton	[4] 12,000.00					
Columbia	65,850.00	1,450.00				
Grafton	[2] 60,000.00					

[1] Issued by county commissioners without vote of people.
[2] Road.
[3] Bridge.
[4] Road and bridge.
[5] Various.

OHIO—Continued.

TABLE 65.—*Road and bridge bonds, 1914*—Continued.

County and township.	Total county and township bonds outstanding Jan. 1, 1915.	Bonds retired in 1914.	Bonds voted in 1914.	Bonds sold in 1914.	Interest rate.	Term of bonds sold.
					Per cent.	*Years.*
Lucas	[2] $1,277,102.15 [3] 382,414.00		$406,905.05 181,394.00	$406,905.05 181,394.00	5 5	 10
Madison	71,000.00		71,000.00	71,000.00	5	
Mahoning	[2] 974,000.00 [3] 293,000.00	$87,500.00	22,000.00 18,000.00	22,000.00 18,000.00	4½ 4½	
Marion	[2] 99,000.00 [3] 79,500.00	46,696.81				
Medina	[2] 90,500.00	6,000.00				
Meigs	[3] 10,000.00	5,000.00				
Mercer	[2] 450,000.00 [3] 65,000.00	50,000.00				
Miami	[2] 66,500.00 [3] 485,000.00	[3] 31,000.00 [2] 10,000.00	300,000.00 61,500.00	300,000.00 61,500.00	5 5	 1–15
Montgomery	[2] 102,000.00 [4] 300,000.00 [3] 140,000.00	[3] 32,000.00 [2] 2,000.00	92,100.00 15,000.00 15,000.00	92,100.00 15,000.00 15,000.00	5 5 5	10 8 8
Morgan	[2] 47,500.00 [3] 180,000.00	183,400.00	20,000.00 35,000.00	20,000.00 35,000.00	5 5	
Morrow	[2] 159,000.00	42,000.00	159,000.00	159,000.00	5	10
Noble	[5] 46,000.00 [3] 35,000.00	2,000.00 [6] 4,000.00				
Ottawa	[2] 19,000.00 [3] 27,300.00	15,400.00				
Paulding	[4] 550,000.00	125,000.00	125,000.00	125,000.00	5	6–10
Pickaway	[2] 62,275.00 [3] 360,000.00	18,450.00	[1] 26,500.00 23,300.00	26,500.00 23,300.00	5 5	 10
Preble		27,000.00				
Portage	[2] 195,500.00		32,500.00	32,500.00	5	
Putnam	[2] 640,000.00	45,000.00	640,000.00	640,000.00	5	
Richland	[3] 20,000.00	16,500.00	[1] 20,000.00	20,000.00	5	10
Ross	[3] 280,000.00	4,000.00				
Sandusky	[2] 45,393.34 [3] 22,500.00	39,625.00	[1] 32,000.00	32,000.00	5	10
Scioto	[2] 440,000.00 [3] 25,000.00	5,000.00				
Seneca	[3] 100,000.00		[1] 100,000.00	100,000.00	5	6–10
Shelby	[2] 12,250.00 [3] 85,000.00	10,750.00				
Summit	[2] 467,118.08 [3] 101,000.00	65,375.00	42,312.58 49,063.00 46,978.63 42,817.20	42,312.58 49,063.00 46,978.63 42,817.20	5 5 5 5	 10
Trumbull	[4] 343,600.00		26,600.00 317,000.00	26,600.00 317,000.00	5 5	
Union	[2] 133,000.00 [3] 32,000.00	70,880.00	4,300.00 11,300.00	4,300.00 11,300.00	5 5	 5
Washington	[3] 180,000.00	10,000.00				
Warren	[3] 310,000.00	8,000.00				
Wayne	[2] 102,000.00		[1] 102,000.00	102,000.00	5	10
Williams	[3] 16,000.00	3,000.00				
Wood	[2] 857,000.00 [3] 39,000.00	200,000.00	[1] 50,000.00 200,000.00 180,000.00 24,833.00 16,000.00	50,000.00 200,000.00 180,000.00 24,833.00 16,000.00	5 5 5 5 5	 5
Total	31,175,968.53	2,684,593.81	8,702,303.46	8,593,303.46		

[1] Issued by county commissioners without vote of people.
[2] Road.
[3] Bridge.
[4] Road and bridge.
[5] Road, including township.
[6] Township.

OREGON.

TABLE 66.—*Road and bridge bonds, 1914.*

County.	Total road and bridge bonds outstanding Jan. 1, 1915.	Bonds voted in 1914.	Bonds sold in 1914.	Interest rate.	Term of bonds sold.
				Per cent.	*Years.*
Clatsop	$400,000	$400,000	$400,000	5	20
Columbia	360,000	360,000	360,000	5	20
Hood River	75,000	75,000	75,000	5	20
Jackson	500,000	500,000	500,000	5	10 to 30
Malheur	30,000	30,000	30,000	6	20
Multnomah	[1] 250,000	.....	.....	5	30
Total	1,615,000	1,365,000	1,365,000	.....	.....

[1] Bridge bonds only.

UTAH.

TABLE 67.—*Road and bridge bonds, 1914.*

County.	Total road and bridge bonds outstanding Jan. 1, 1915.	Bonds voted in 1914.	Bonds sold in 1914.	Interest rate.	Term of bonds sold.
				Per cent.	*Years.*
Boxelder	$175,000	.....	.....	.....	.....
Carbon	30,000	.....	.....	.....	.....
Emery	35,000	.....	.....	.....	.....
Grand	19,000	$10,500	$10,500	5	20
San Juan	14,500	.....	.....	.....	.....
Uinta	8,000	.....	.....	.....	.....
Total	281,500	10,500	10,500	.....	.....
	[1] 260,000	.....	.....	.....	.....
Grand total	541,500	.....	.....	.....	.....

[1] State bond issue for construction of State roads and bridges.

WASHINGTON.

TABLE 68.—*Road and bridge bonds, 1914.*

County.	Total road and bridge bonds outstanding Jan. 1, 1915.	Bonds voted in 1914.	Bonds sold in 1914.	Interest rate.	Term of bonds sold.
				Per cent.	*Years.*
Asotin	$75,000.00	$35,000.00	$35,000.00	5	20
Clallam	390,000.00	.....	.....	.....	.....
King	800,000.00	.....	.....	.....	.....
Okanogan	.....	[1] 23,274.27	.....	.....	.....
Pacific	100,000.00	.....	.....	.....	.....
Wahkiakum	.....	[1] 75,000.00	.....	.....	.....
Total	1,365,000.00	133,274.27	35,000.00	.....	.....
	[2] 190,000.00	.....	.....	.....	.....
Grand total	1,555,000.00	.....	.....	.....	.....

[1] Not sold until 1915.
[2] State bonds issued in 1911 for bridge across Columbia River at Wenatchee.

WISCONSIN.

TABLE 69.—*Road and bridge bonds, 1914.*

County.	Total road and bridge bonds outstanding Jan. 1, 1915.	Bonds voted in 1914.	Bonds sold in 1914.	Interest rate.	Term of bonds sold.	Bond money expended in 1914.	Bonds retired in 1914.
				Per cent.	*Years.*		
Ashland	$42,500	.....	.....	.....	.....	.....	.....
Bayfield	3,000	.....	.....	.....	.....	$1,000	$1,000
Burnett	1,600	$1,500	$1,500	5	5	1,501	2,250
Clark	10,548	.....	.....	.....	.....	.....	.....
Columbia	18,000	.....	.....	.....	.....	.....	.....
Florence	30,000	.....	.....	.....	.....	.....	2,000
Forest	3,000	.....	.....	.....	.....	.....	.....
Grant	10,000	.....	.....	.....	.....	.....	.....
Iron	14,000	.....	.....	.....	.....	27,000	7,000
La Crosse	12,850	.....	.....	.....	.....	4,000	.....
Lincoln	8,000	.....	.....	.....	.....	.....	.....
Marathon	7,000	.....	.....	.....	.....	.....	.....
Marinette	4,200	.....	.....	.....	.....	700	700
Oneida	18,000	.....	.....	.....	.....	.....	.....
Rusk	24,000	20,000	20,000	5	10	.....	.....
St. Croix	1,080	.....	.....	.....	.....	.....	.....
Sauk	12,800	.....	.....	.....	.....	5,000	1,600
Vilas	53,000	.....	.....	.....	.....	.....	.....
Wood	7,500	.....	.....	.....	.....	.....	500
Total	281,078	21,500	21,500	.....	.....	40,201	16,050

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